

SPECIAL INTEREST GROUP COMMENTS AND RESPONSES

Code	Comment Document
	<div><div><div><div><div></div><div><div></div></div></div><div><div><div>From:</div><div>To:</div><div>Subject:</div><div>Date:</div><div>Attachments:</div></div><div><div>Projects</div><div>ADOT</div><div>FW: Build the South Mountain Freeway</div><div>Wednesday, May 22, 2013 10:50:39 AM</div><div>SouthMountainFreewayProject_Letter.pdf</div></div></div></div></div><div><div></div><div><div><div>From:</div><div>Sent:</div><div>To:</div><div>Cc:</div><div>Subject:</div></div><div><div> </div><div>Helen Heiden [mailto:hheiden@azchamber.com]</div><div>Tuesday, May 21, 2013 12:53 PM</div><div>Projects</div><div>info@buildthe202.com; Glenn Hamer</div><div>Build the South Mountain Freeway</div></div></div></div><div><div></div><div>Attached please find a letter from the Arizona Chamber of Commerce and Industry supporting the South Mountain Freeway project.</div></div><div><div></div><div></div></div><div><div></div><div>May 21, 2013</div></div><div><div></div><div>Arizona Department of Transportation</div><div>205 South 17th Avenue, #371</div><div>Phoenix, Arizona 85007</div><div>Delivered via email</div></div><div><div></div><div>To Whom It May Concern:</div></div><div><div></div><div>The Arizona Chamber of Commerce and Industry strongly supports the construction of the South Mountain Freeway. We believe that this freeway addition will cut traffic congestion across the metro area, reduce air pollution, and have a positive impact on Arizona’s economy.</div></div><div><div></div><div>Arizona’s workers rely on our roads and freeways as an efficient way to get to and from their workplace. If we don’t build the South Mountain Freeway, traffic in the region will get much worse over the next two decades. According to a study conducted by the Arizona Department of Transportation, morning and evening commute times will increase 39% to 82% over the next twenty years and traffic congestion on city streets will increase by 46%. This means vehicles will spend longer periods of time idling in traffic, consequently increasing air pollution in the area.</div></div><div><div></div><div>The South Mountain Freeway project is also crucial to Arizona’s economic recovery. The project will create 30,000 jobs during the five to six year construction period and result in a \$2 billion investment in the Phoenix economy.</div></div><div><div></div><div>Furthermore, The South Mountain Freeway is welcomed with broad support across Maricopa County by a near 2-1 margin according to a poll commissioned by We Build Arizona. The poll also revealed that voters in Ahwatukee and Laveen, who would be directly affected by the construction, view the freeway project with 59% support.</div></div></div>

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Code	Issue	Response
1		Comment noted.

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The Arizona Chamber of Commerce and Industry encourages you to move forward and build the South Mountain Freeway.

Sincerely,



Glenn Hamer
President and CEO

Helen Heiden
Government Relations
Arizona Chamber of Commerce and Industry
Arizona Manufacturers Council
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1	<div><p>May 21, 2013</p><p>Arizona Department of Transportation 205 South 17th Avenue, #371 Phoenix, Arizona 85007 Delivered via email</p><p>To Whom It May Concern:</p><p>The Arizona Chamber of Commerce and Industry strongly supports the construction of the South Mountain Freeway. We believe that this freeway addition will cut traffic congestion across the metro area, reduce air pollution, and have a positive impact on Arizona's economy.</p><p>Arizona's workers rely on our roads and freeways as an efficient way to get to and from their workplace. If we don't build the South Mountain Freeway, traffic in the region will get much worse over the next two decades. According to a study conducted by the Arizona Department of Transportation, morning and evening commute times will increase 39% to 82% over the next twenty years and traffic congestion on city streets will increase by 46%. This means vehicles will spend longer periods of time idling in traffic, consequently increasing air pollution in the area.</p><p>The South Mountain Freeway project is also crucial to Arizona's economic recovery. The project will create 30,000 jobs during the five to six year construction period and result in a \$2 billion investment in the Phoenix economy.</p><p>Furthermore, The South Mountain Freeway is welcomed with broad support across Maricopa County by a near 2-1 margin according to a poll commissioned by We Build Arizona. The poll also revealed that voters in Ahwatukee and Laveen, who would be directly affected by the construction, view the freeway project with 59% support.</p><p>The Arizona Chamber of Commerce and Industry encourages you to move forward and build the South Mountain Freeway.</p><p>Sincerely,</p><p>Glenn Hamer President and CEO</p><div><p>3200 North Central Avenue, Suite 1125 • Phoenix, AZ 85012 www.azchamber.com • Phone 602-248-9172 • Fax 602-265-1262</p></div></div>

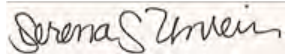
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Code	Issue	Response
1	Purpose and Need	<p>The analyses in the Draft Environmental Impact Statement used socioeconomic and traffic projections at the regional analysis zone and traffic analysis zone levels. At the time of publication of the Draft Environmental Impact Statement, Census 2010-based socioeconomic data at the regional analysis zone and traffic analysis zone levels had not been adopted by the Maricopa Association of Governments and were not available to the project team. Therefore, the data used in the Draft Environmental Impact Statement were the most appropriate information available.</p> <p>The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future. The traffic analysis used the Maricopa Association of Governments travel demand model (TransCAD software platform), as certified by the Federal Highway Administration and reviewed by the U.S. Environmental Protection Agency for air quality conformity (see Final Environmental Impact Statement page 3-27). The model projects demand for multiple modes of travel, including automobile, bus, and light rail. Driving patterns and alternative modes of transportation are among the key model inputs used to forecast travel demand in the Study Area.</p>
2	Purpose and Need	<p>The proposed freeway is part of a multimodal transportation plan, the <i>Regional Transportation Plan</i>, that includes substantial investments in transit, nonmotorized travel, and system management and demand management strategies. The proposed freeway is part of the system needed in the region to address future travel needs for the movement of people, goods, and services. The comment relies on national trends for travel; however the local conditions and setting of the Phoenix metropolitan area are not consistent with areas of high-density cities in other parts of the country. In Maricopa County, daily vehicle miles traveled levels increased by almost 2 percent between 2011 and 2012 and the 2012 daily vehicle miles traveled is approaching the prerecession peak in 2007. (<i>Source: Arizona Department of Transportation Multimodal Planning Division Highway Performance Monitoring System Data for the Calendar Year 2012 and 2011</i>). Even if the trend of vehicle miles traveled “per capita” decreasing continues, the total vehicle miles traveled in the region would still increase along with increases in total population.</p>

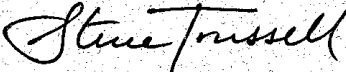
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	<p>According to Federal Highway Administration data, total vehicle-miles travelled (VMT) for Arizona is last reported for 2011 at 59,574 million annually,³ which is a decline of more than 5 percent from the peak year of 2007 when Arizona topped out at 62,963 million miles.⁴ Furthermore, a graphic in the summary of the draft EIS places an unnecessarily large arrow covering what has happened to VMT since 2005,⁵ thus obscuring how post-2005 data actually assumes reversal of current trends.</p> <p>The VMT projected in the draft EIS are, at best, out-of-date, and at worst, inaccurate and could greatly overstate future driving patterns.</p> <p>Please do not hesitate to contact me if you have any questions. I can be reached at sunrein@arizonapirg.org or at 602-252-1184.</p> <p>Sincerely,</p> <div></div> <p>Serena Unrein Public Interest Advocate</p> <hr/> <p>³ Highway Statistics 2011, Federal Highway Administration. http://www.fhwa.dot.gov/policyinformation/statistics/2011/vm2.cfm</p> <p>⁴ Highway Statistics 2007, Federal Highway Administration. http://www.fhwa.dot.gov/policyinformation/statistics/2007/vm2.cfm</p> <p>⁵ South Mountain Freeway draft EIS summary, Arizona Department of Transportation, page 2. http://www.azdot.gov/Highways/Valley_Freeways/Loop_202/South_Mountain/PDF/FHWA-AZ-EIS/00b-SMDEIS-Summary-Chapter_Description-of-the-Proposed-Action.pdf</p>

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1	<div></div> <p>May 17, 2013</p> <p>Arizona Department of Transportation Attn: South Mountain Study Team 1655 W. Jackson St. MD 126F Phoenix, AZ 85007</p> <p><u>RE: Support of the 202 South Mountain Freeway Project</u></p> <p>Members of the ADOT South Mountain Study Team:</p> <p>The Arizona Rock Products Association (ARPA) supports moving forward expeditiously with the 202 Freeway Project. The South Mountain 202 freeway project will significantly reduce traffic congestion across the Phoenix metro area, reduce air pollution, create jobs and save drivers' time and money.</p> <p>ARPA has been providing representation for 38 member companies involved with the production of aggregates, asphaltic concrete, ready mix concrete, asphalt, lime products, and portland cement. ARPA members, include over 53 associate members providing related transportation, contracting, and consulting services to vital state infrastructure projects like these.</p> <p>The Traffic</p> <p>The Valley's freeways, especially I-10, are congested throughout different times of the day. Traffic on Interstate 10 is projected to grow significantly between now and 2035. According to an ADOT study we may be facing a 28% increase in volumes. Specific locations within the Phoenix Metropolitan area could see increases of 103,000 cars every day. Travel times will increase without the South Mountain Freeway and commutes can be expected to take from 39% to 82% longer if nothing is done to relieve congestion. As a result, traffic on surface streets will grow 46% by 2035. Something can and must be done.</p> <p>The Environment</p> <p>The same report indicates the project also will positively impact air pollution by reducing the time vehicles spend stuck in traffic. Valley commuters spend inordinate amounts of time in traffic jams throughout the valley which exacerbate our current air quality issues and business, industry and taxpayers pay for dearly in the form of additional measures to reduce emissions. Likewise, we risk loss of further transportation funding if we fail to attain at the air quality monitors. It is incumbent on us to pursue transportation options that reduce emissions.</p> <div><p>916 West Adams Street • Phoenix, AZ 85007-2732</p><p>(602) 271-0346 • Fax (602) 255-0363 • www.azrockproducts.com</p></div>

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	<div><p>The Economy</p><p>There is no more important transportation project to the area's commuters and workers than the South Mountain Freeway project. The 202 will create 30,000 jobs during the five to six year construction period and result in a \$2 billion dollar investment in the Phoenix-area economy.</p><p>Let's Go!</p><p>Based on recent polls, 64.3% of likely voters in Maricopa County support construction of the freeway. Further, in a separate survey, 59% of likely voters living in Ahwatukee and Laveen support the freeway. The support is there for the project, the money to build the freeway is in the budget and it was approved by voters twice, first in 1985 and again in 2004. It is clearly time to begin construction on the South Mountain 202!</p><p>Sincerely,</p><div></div><p>Steve Trussell Executive Director</p></div>

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1 for by the citizens. It is they who enjoy the
2 multitude of trails and recreational opportunities
3 provided by these Preserves. So it is only fitting
4 and proper that they decide if roadways are
5 appropriate."

6 Thank you for your diligent consideration
7 and support of this popular cause. Thank you.

8 THE FACILITATOR: Thank you,
9 Mr. Gironda.

10 Prem Goyal? Did I pronounce that
11 correctly? Are you in the auditorium?

12 Okay. We'll go to the next name. Steve
13 Trussell. Steve Trussell in the auditorium? Here he
14 comes.

15 If there's anyone else in the auditorium
16 that would like to speak today, please make sure you
17 register first; that way we can get your name into
18 the list. Yes, please, right here.

19 And sir, your name is?

20 MR. TRUSSELL: Steve Trussell.

21 THE FACILITATOR: Steve Trussell.

22 MR. TRUSSELL: I'm with the Arizona Rock
23 Products Association, and we support moving forward
24 expeditiously with the 202 Freeway project. The
25 southbound 202 Freeway project will significantly

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1		Comment noted.

Code	Comment Document
	<div>1 reduce traffic congestion across the Phoenix 2 metropolitan area, reduce air pollution, create new 3 jobs, and save drivers time and money. 4 ARPA has been providing representation 5 for 38 producer companies of aggregates, asphalt and 6 concrete, readymix concrete, asphalt lime products 7 and Portland cement. ARPA members include over 53 8 associate members providing related transportation, 9 contracting, and consulting services for the vital 10 state infrastructure projects like these. 11 First of all, I'd like to talk about the 12 traffic very quickly. The Valley's freeways, 13 especially I-10, are congested throughout different 14 times of the day, as we all know, and traffic on 15 Interstate 10 is projected to grow significantly 16 between now and 2035. According to an ADOT study, we 17 may be facing a 28 percent increase in volumes. 18 Specific locations within the Phoenix 19 metropolitan area can see increases of 103,000 cars 20 every day. Travel times will increase without the 21 South Mountain Freeway and commutes can be expected 22 to take 39 to 82 percent longer if nothing is done to 23 relieve the congestion. 24 As a result, traffic on surface streets 25 will grow 46 percent by 2035. Something can and must</div> <div>Page 22 Driver and Nix Court Reporters - (602) 266-6525 www.drivernix.com</div>

Code	Issue	Response

Code	Comment Document
	<div><div>1 be done, given the fact that this is a project that's</div><div>2 already been voted on twice and the funding is</div><div>3 available.</div><div>4 Now, regarding the environment, the same</div><div>5 report indicates the project will also positively</div><div>6 impact air pollution by reducing the time vehicles</div><div>7 spend stuck in traffic. Valley commuters spend</div><div>8 inordinate amounts of time in traffic jams throughout</div><div>9 the Valley, which exacerbate our current air quality</div><div>10 issues and business and industry taxpayers pay for</div><div>11 this dearly in the form of additional measures to</div><div>12 reduce emissions. Likewise, we risk loss of further</div><div>13 transportation funding if we fail to attain at the</div><div>14 air quality monitors.</div><div>15 It is incumbent upon us to pursue</div><div>16 transportation options that reduce emissions. There</div><div>17 is no more important transportation project to the</div><div>18 area's commuters and workers than the South Mountain</div><div>19 Freeway project. The 202 will create 30,000 jobs</div><div>20 during the next five- to six-year construction</div><div>21 period, and result in a \$2 billion investment in the</div><div>22 Phoenix area economy.</div><div>23 So let's move on. And based on the</div><div>24 recent polls, 64 percent of likely voters in Maricopa</div><div>25 County support construction of the freeway. Further,</div></div> <div>Page 23</div> <div>Driver and Nix Court Reporters - (602) 266-6525 www.drivernix.com</div>

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	<div><div></div><div><div>1in a separate survey, 59 percent of likely voters</div><div>2living in the Ahwatukee and Laveen area support the</div><div>3freeway as well.</div><div>4The support is there for the project, and</div><div>5the money to build the freeway is in the budget, as</div><div>6it was approved by voters twice, in '85 and in 2004.</div><div>7It's clearly time to begin construction on the South</div><div>8Mountain. Thank you.</div><div>9THE FACILITATOR: Thank you,</div><div>10Mr. Trussell.</div><div>11Ariel LeBarron.</div><div>12MS. LeBARRON: Hello, my name is Ariel</div><div>13LeBarron, and I am a student at the School of</div><div>14Feasibility. I grew up here, I was born and raised.</div><div>15And I oppose the South Mountain Freeway, just because</div><div>16it would increase air pollution, and I feel there are</div><div>17better alternatives that we could be putting our tax</div><div>18money into, such as public transportation. This</div><div>19would increase our air quality, so that our future</div><div>20generations wouldn't be as affected. And I think by</div><div>21putting a freeway and expanding it outward is going</div><div>22to make people use and buy cars more, instead of</div><div>23trying to switch to public transportation.</div><div>24I think for our future we should be</div><div>25focusing on better alternatives. Thank you.</div></div></div> <div><div>Page 24</div><div>Driver and Nix Court Reporters - (602) 266-6525 www.drivernix.com</div></div>

Code	Issue	Response

Code	Comment Document
1	<div><div><div><div><div><div></div></div></div><div><div><div></div><div></div></div></div><div><div><div></div><div></div></div></div><div><div><div></div></div></div></div></div><div><div><div>From: Rusty Crerand</div><div>To: ADOT</div><div>Cc: Jennifer Greutz</div><div>Subject: Loop 202 S. Mt.</div><div>Date: Monday, June 10, 2013 11:31:18 AM</div><div>Attachments: image001.png</div></div></div><div><p>I just got a call from the Director's Office. Lila received a call from a Mr. Steve Brittle from Don't Waste Arizona. He is very upset that a number he was given to make a comment on the South Mountain Project 602-712-7767 doesn't work or won't let him leave a comment. He is threatening to escalate his actions if this isn't corrected. I've included the link to the website of the organization he represents. I have not spoken to the gentleman, but I was told he would like to have someone call him ASAP.</p><p>Please let me know who can contact Mr. Brittle.</p><p>http://dontwastearizona.org/about.html</p><p>Rusty Crerand Constituent Services Officer 206 S. 17th Ave. MD 118A Room 101 Phoenix, AZ 85007 602.712.7856 dcrerand@azdot.gov</p><div></div><div><p>Confidentiality and Nondisclosure Notice: This email transmission and any attachments are intended for use by the person(s)/entity(ies) named above and may contain confidential/privileged information. Any unauthorized use, disclosure or distribution is strictly prohibited. If you are not the intended recipient, please contact the sender by email, and delete or destroy all copies plus attachments.</p><p>.</p></div></div></div>

Code	Issue	Response
1	Public Involvement	Comment noted.

Code Comment Document

From: [Rusty Crerand](#)
To: [ADOT](#)
Cc: [Jennifer Grentz](#)
Subject: RE: Loop 202 S. Mt.
Date: Monday, June 10, 2013 4:30:05 PM
Attachments: [image001.png](#)

1

Mr. Brittle is calling the Director's office wondering where to pick up some documents. Apparently someone called him today around 1:00, but he doesn't know where to go and is worried because it's after 4:00. Could whoever called him let me know what's been arranged. The Director's office is confused and has no idea of what he is talking about.

Thanks,

Rusty Crerand
Constituent Services Officer

206 S. 17th Ave.
MD 118A Room 101
Phoenix, AZ 85007
602.712.7856
dcrerand@azdot.gov

The logo for ADOT Communications, featuring the letters "ADOT" in a stylized, bold font with a red underline, and the word "Communications" in a smaller, sans-serif font below it.

From: Rusty Crerand
Sent: Monday, June 10, 2013 11:31 AM
To: 'adot@hdrinc.com'
Cc: Jennifer Grentz
Subject: Loop 202 S. Mt.

I just got a call from the Director's Office. Lila received a call from a Mr. Steve Brittle from Don't Waste Arizona. He is very upset that a number he was given to make a comment on the South Mountain Project 602-712-7767 doesn't work or won't let him leave a comment. He is threatening to escalate his actions if this isn't corrected. I've included the link to the website of the organization he represents. I have not spoken to the gentleman, but I was told he would like to have someone call him ASAP.

Please let me know who can contact Mr. Brittle.

<http://dontwastearizona.org/about.html>

Rusty Crerand
Constituent Services Officer

206 S. 17th Ave.
MD 118A Room 101
Phoenix, AZ 85007
602.712.7856
dcrerand@azdot.gov

Code	Issue	Response
1	Public Involvement	<p>The first record of a call placed to the Arizona Department of Transportation Environmental Planning Group by the commenter was Saturday, June 8, 2013. The call was returned to the commenter on Monday, June 10, 2013, and a disc containing the technical reports was provided on the same day.</p> <p>On June 17, 2013, the commenter contacted the Arizona Department of Transportation by e-mail to request a scoping technical report, if one existed. The scoping technical report was provided on June 18, 2013. Two of the technical reports requested [Cultural Resources and Section 4(f)] contained confidential information. After discussion with the Federal Highway Administration, release of the reports, in redacted form, was approved. Additional time was needed for the Arizona Department of Transportation's cultural resources staff to review the documents and to redact the information deemed confidential. However, the redacted technical reports were provided on June 28, 2013.</p> <p>Because the comment period on the Draft Environmental Impact Statement was doubled for this project (90-day comment period instead of the 45-day comment period required by 40 Code of Federal Regulations 1506.10), the commenter had adequate time to prepare comments.</p>

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Code	Issue	Response

Code	Comment Document
	<div>4357</div> <div><div>1with the panel, they are here to listen to your comments,</div><div>2they are indeed comments.</div><div>3So at this point I'd like to go ahead and get</div><div>4started, and we have one preregistered person who has</div><div>5arrived and that person is Maxine Lakin -- I'm sorry,</div><div>6Joanne McCarthy will go first.</div><div>7And as you see your names in the queue, you're</div><div>8welcome to come up to each microphone so we can keep</div><div>9people moving.</div><div>10We will now proceed to the non-preregistered</div><div>11procedure, so at this point, Steve Brittle, please.</div><div>12MR. BRITTLE: My name is Steve Brittle, I'm the</div><div>13president of an organization named Don't Waste Arizona.</div><div>14We'll be filing substantive comments later, but I want to</div><div>15put something on the record immediately. Upon review of</div><div>16this wholly inadequate environmental impact statement</div><div>17draft, I have seen many in my life, I've never seen one</div><div>18so wrong and so devoid of real and current information.</div><div>19The real shocker to me as an expert in Hazmat is</div><div>20the chapter in Hazmat does not talk about the risk of</div><div>21truck transportation of hazardous materials. And when I</div><div>22first looked at that I thought well, certainly HDR, who</div><div>23has done this kind of thing, should know about commodity</div><div>24flow studies done by the state emergency response</div><div>25commission, so I went there to get them and I got them.</div></div> <div><div>1</div><div>Page 4</div><div>Driver and Nix Court Reporters - (602) 266-6525 www.drivernix.com</div></div>

Code	Issue	Response
1	Hazardous Materials	<p>Arizona highways, as are most highways across the United States, are open to all kinds of traffic, so long as the cargo being carried is in accordance with U.S. Department of Transportation regulations for the specific type of cargo. The Arizona Department of Transportation has a few locations in the state with hazardous cargo restrictions, but these restrictions are based on emergency response issues or roadway design limitations specific to that location. For example, the Interstate 10 Deck Park Tunnel has certain hazardous cargo transport restrictions because of the limited ability for emergency responders to address a hazardous materials incident in the tunnel. The South Mountain Freeway, if implemented, is expected to operate under the same rules as other similar facilities in the state; transport of hazardous cargo would be expected to be permissible (see text box on page 4-166 of the Final Environmental Impact Statement).</p> <p>The project team is aware of the Hazardous Materials Commodity Flow Studies that the Arizona State Emergency Response Commission maintains. These studies are used by emergency response planners (such as the Arizona State Emergency Response Commission statewide and the Maricopa County Local Emergency Planning Commission for Maricopa County) as one of the elements considered when developing emergency response plans. If the plan is amended, it is made available to the Arizona Department of Transportation.</p> <p>In the event of an incident with a hazardous materials issue on a State or federal highway, the emergency responders contact the Arizona Department of Transportation's Traffic Operations Center to report the incident. The Traffic Operations Center then contacts the Arizona Department of Transportation's Safety and Risk Management group, which responds to the accident scene and assesses needs in concert with the Incident Commander from the responding agency with jurisdiction. If requested, the Arizona Department of Transportation can assist cleanup activities by engaging specialty subcontractors with whom the Arizona Department of Environmental Quality has contracts for such support. The Arizona Department of Transportation's Safety and Risk Management group's charge is primarily public health protection, with cleanup support being secondary. According to 46 <i>Federal Register</i> 18026 (March 23, 1981), the environmental impact statement must discuss reasonably foreseeable actions. These are actions that are likely to occur or probable, rather than those that are merely possible.</p>

Code	Comment Document
	<div><div><div>1 And I also found out that HDR was under contract with</div><div>2 ADOT to look at all of that information. Now, in the</div><div>3 commodity flow study they talked about what kinds of</div><div>4 chemicals are being transported on the highways and all</div><div>5 the information is there; but, of course, this was</div><div>6 deliberately excluded because it would lead only to the</div><div>7 logical conclusion of a no-build.</div><div>8 You would breathe in chemicals that would have</div><div>9 never been in that community of Ahwatukee or Laveen ever</div><div>10 before; 77,000 people in Ahwatukee, 35,000 people in</div><div>11 Laveen will be at imminent risk of death because the area</div><div>12 that -- where people would be killed or harmed includes</div><div>13 in the case of a worst-case scenario from chlorine</div><div>14 release, which is on the highway documented, would kill</div><div>15 most people in Ahwatukee within five minutes. There is</div><div>16 no way out. This is a unique cul-de-sac-type community</div><div>17 and you're even going to remove one of the routes out of</div><div>18 there by taking away the 30th exit street alignment on</div><div>19 Pecos Road, so it's a death trap. The people in Laveen,</div><div>20 35,000 of them, they don't have this kind of stuff in</div><div>21 their community. They would never know and they would be</div><div>22 over with.</div><div>23 Now, it's obvious that HDR and ADOT knew about</div><div>24 all of this. The warnings are right there even in the</div><div>25 executive summaries of these transportation commodity</div></div><div>Page 5</div><div>Driver and Nix Court Reporters - (602) 266-6525 www.drivernix.com</div></div>

Code	Issue	Response

Code	Comment Document
	<div><div>1 flow studies, which means in this case we go beyond the</div><div>2 pale of ignorant or a slant. I think we're in the area</div><div>3 of felonious behavior, fraud, racketeering, and we're</div><div>4 going to be urging the attorney general of this state to</div><div>5 do a probe of ADOT and HDR.</div><div>6 You spent \$22 million and you didn't do anything</div><div>7 with it other than lie, obfuscate, and eliminate anything</div><div>8 that might lead to the logical conclusion, which is the</div><div>9 no-build option. And we will be waiting for them in</div><div>10 court. I have to say, I have to thank them, such a</div><div>11 deficient and devoid argument should make it pretty much</div><div>12 easier than we had anticipated to litigate this, and</div><div>13 hopefully, with any luck, some of these people will</div><div>14 actually go to jail. Thank you.</div><div>15 THE FACILITATOR: Thank you, Mr. Brittle.</div><div>16 One more comment before we continue. For those</div><div>17 of you who see their name on the screen, if you're in the</div><div>18 back part of the room if you want to make your way up so</div><div>19 we can get people closer to the microphone, that would</div><div>20 help us throughout the day, so feel free to move up.</div><div>21 Just one note for those of you who are -- and we</div><div>22 understand it's very difficult sometimes in working with</div><div>23 prepared notes, to keep in mind the time here, so if you</div><div>24 would from time to time, if you're working from notes</div><div>25 please take time out to double-check the time. You're</div></div> <div>Page 6</div> <div>Driver and Nix Court Reporters - (602) 266-6525 www.drivernix.com</div>

Code	Issue	Response

Code	Comment Document
	<div><div><div><div><div></div><div>From: Don't Waste Arizona</div><div>To: Projects</div><div>Subject: Comment regarding the South Mountain Freeway DEIS: call for audit of ADOT and federal grand jury</div><div>Date: Wednesday, July 24, 2013 5:22:09 PM</div></div></div></div></div>
	<p>Don't Waste Arizona, Inc. (DWAZ) is a non-profit environmental organization dedicated to the protection and preservation of the environment in Arizona. DWAZ is especially concerned about dishonest government agencies that do not do their job, environmental justice, civil rights protections, risks from hazardous materials and toxics, and air pollution. DWAZ has an extensive, successful background in litigation enforcing federal environmental laws and some NEPA cases.</p> <p>DWAZ is headquartered at 6205 South 12th Street, Phoenix, AZ 85042, and may be reached at (602) 268-6110. DWAZ has members in the affected areas. DWAZ is allied with PARC, et al for the purposes of preparing comments in opposition to the freeway, and the use of these comments by these allies is allowed and unrestricted. Stephen Brittle, President of Don't Waste Arizona, is also a member of PARC.</p> <p>After reviewing the expert comments and submittals for PARC et al, DWAZ states its opinion in the following comments:</p> <p>There is no way that the DEIS is valid in any way, and there is no accident that it is a deceitful, deficient, and fraudulent document. This has to be by design; the pattern of errors and miscalculation as presented in this DEIS cannot occur randomly. There is evidence of a pattern of deception and deceit, of what appears to be fraud, of a deliberate withholding of critical information that would put the proposed freeway in a negative light, and of negligence, perhaps criminal intent.</p> <p>Some examples of what leads DWAZ to this conclusion:</p> <div><div>1</div><div>The withholding of the public documents that NEPA requires to be openly available during the time 90-day comment period, and the long delays in responding to public records requests, including the production of some documents without communicating the request for records was incomplete.</div></div> <div><div>1</div><div>The statements in the DEIS about the availability of documents and their being placed at certain public repositories when they were never placed there, and calling the numbers listed in the DEIS to get access or copies were not returned.</div></div> <div><div>2</div><div>The willingness to represent that the South Mountain Freeway would reduce air pollution when it would instead worsen it and harm public health along the freeway route by exceedances of the particulate matter and carbon monoxide standards, which indicates a knowing and informed willingness to put public health and safety at risk.</div></div> <div><div>3</div><div>The misrepresentation of the hazards and risks of Mobile Source Air Toxics along the freeway route, by not stating honestly that there is already a severe problems with high levels of Mobile Source Air Toxics along the freeway route, which indicates a knowing and informed willingness to put public health and safety at risk.</div></div> <div><div>4</div><div>The complete omission of the risks caused by transportation of hazardous materials along the</div></div>

Code	Issue	Response
1	Public Involvement	<p>The Draft Environmental Impact Statement was made available at five public locations throughout the area and was available for purchase at one location. All hard copies of the Draft Environmental Impact Statement placed for public viewing contained the appendices as a compact disc in pockets in the back of the document. The Draft Environmental Impact Statement was also available by compact disc by request, at the public hearing, and on the Web site at <azdot.gov/southmountainfreeway>. These locations were advertised and the public notification history is documented on page 6-23 of the Draft Environmental Impact Statement. Technical reports and other information were available by request.</p> <p>The first record of a call placed to the Arizona Department of Transportation Environmental Planning Group by the commenter, was Saturday, June 8, 2013. The call was returned to the commenter on Monday, June 10, 2013 and a disc containing the technical reports was provided on the same day.</p> <p>On June 17, 2013, the commenter contacted the Arizona Department of Transportation by e-mail to request a scoping technical report, if one existed. The scoping technical report was provided on June 18, 2013. Two of the technical reports requested (Cultural Resources and Section 4[f]) contained confidential information. After discussion with the Federal Highway Administration, release of the reports, in redacted form, was approved. Additional time was required for the Arizona Department of Transportation's cultural staff to review the documents and to redact the information deemed confidential. However, the redacted technical reports were provided on June 28, 2013.</p> <p>Because the comment period on the Draft Environmental Impact Statement was doubled for this project (90-day comment period instead of the 45-day comment period required by 40 Code of Federal Regulations 1506.10), the commenter had adequate time to prepare comments.</p>
2	Air Quality	<p>The carbon monoxide analysis presented on page 4-65 of the Draft Environmental Impact Statement and updated on page 4-75 of the Final Environmental Impact Statement represents projected carbon monoxide concentrations along the project corridor, including those proposed interchange locations along the South Mountain Freeway. The Arizona Department of Transportation also conducted a quantitative particulate matter (PM₁₀) hot-spot analysis that is discussed on page 4-76 of the Final Environmental Impact Statement. The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones.</p>
3	Air Quality	<p>The emissions modeling developed for the proposed action showed that for the mobile source air toxics study area, constructing the freeway would have a marginal effect on total mobile source air toxics emissions in 2025 and 2035 (less than a 1 percent difference in total annual emissions between the Preferred Alternative and No-Action Alternative) (see discussion beginning on page 4-77 of the Final Environmental Impact Statement). With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions.</p>
(Response 3 continues on next page)		

Code	Comment Document
	<p>South Mountain Freeway and the likelihood that there would be serious loss of life and severe public health impacts in the event of an incident involving the release of hazardous chemicals, especially when ADOT had its contractor for the DEIS review all of the Hazardous Materials Commodity Flow Studies at the Arizona Emergency Response Commission, therefore knowing quite well of the nature and frequency of the transport of these chemicals, which indicates a knowing and informed willingness to put public health and safety at risk.</p>
5	<p>The failure to utilize the most current data and scientific methods in preparing the DEIS, contrary to regulation, and mostly using data, reports, and studies that are eight years old, in violation of NEPA regulations.</p>
6	<p>The expenditure of over \$22 million in the preparation of the DEIS as well as the \$87 million+ in acquiring properties along the proposed route before the NEPA process was completed; indeed starting 14 years before the NEPA process even began, and purchasing \$43 million of properties just along the 59th Avenue alignment, while pretending that there were three alternative routes being examined in the DEIS.</p> <p>The strange concoctions of formulas represented to the public as legitimate modeling of data to show the desired outcomes of supporting the freeway, when no capable or competent environmental professional would ever use the data that was used, nor would these calculations ever be conducted in the manner they were, which indicates a knowing and informed willingness to put public health and safety at risk.</p>
7	<p>The omission of any information about the WQARF sites that the western alignment would cross, and the environmental contamination liability and cleanup costs that the public would assume as a result of the condemnation of the affected properties.</p> <p>The many unsubstantiated statements and assertions in the DEIS that have no basis in fact or have accompanying documentation.</p>
8	<p>The lack of any discussion of the severe property devaluation that would occur along the freeway route, especially in Ahwatukee Foothills along the Pecos Toad alignment.</p>
9	<p>The arbitrary rejection of alternate routes for the freeway through the years, and the arbitrary rejection of SMCAT's choice, the 101 alignment.</p>
10	<p>The racist and discriminatory dismissal of native American tribal concerns about a mountain that is sacred to them.</p> <p>Because of the aforementioned, DWAZ concludes that the proper action should be an audit of ADOT and the convening of a federal-level grand jury investigation of ADOT in these matters, as this DEIS is what appears to be a fraudulent scheme to get federal money for an ill-advised freeway that would solve no problems regarding traffic flow, congestion, and air pollution.</p> <p>Stephen M. Brittle</p> <p>President</p>

Code	Issue	Response
3 (cont.)		<p>The Preferred Alternative would also reduce in-vehicle mobile source air toxics exposure as opposed to the No-Action Alternative. The U.S. Environmental Protection Agency has found that in-vehicle benzene concentrations were between 2.5 and 40 times higher than nearby ambient concentrations, based on a review of studies discussed in the Regulatory Impact Analysis for the U.S. Environmental Protection Agency's 2007 mobile source air toxics rule-making (Final Regulatory Impact Analysis, Environmental Protection Agency 420-R-07-002, 3-17 [February 2007]). Construction of the South Mountain Freeway would result in a reduction in benzene exposure to drivers and passengers for two reasons: decreased travel times (motorists would spend less time in traffic to reach their destinations) and lower emissions rates (attributable to speed improvements). Reducing on-road exposure would provide a health benefit for motorists using the freeway under consideration. Congestion relief resulting from the proposed freeway would provide localized air quality emissions reductions on area freeways and arterial streets and at interchanges, benefiting users of area highways and those living near congested roads.</p>
4	Hazardous Materials	<p>Arizona highways, as are most highways across the United States, are open to all kinds of traffic, so long as the cargo being carried is in accordance with U.S. Department of Transportation regulations for the specific type of cargo. The Arizona Department of Transportation has a few locations in the state with hazardous cargo restrictions, but these restrictions are based on emergency response issues or roadway design limitations specific to that location. For example, the Interstate 10 Deck Park Tunnel has certain hazardous cargo transport restrictions because of the limited ability for emergency responders to address a hazardous materials incident in the tunnel. The South Mountain Freeway, if implemented, is expected to operate under the same rules as other similar facilities in the state; transport of hazardous cargo would be expected to be permissible (see text box on page 4-166 of the Final Environmental Impact Statement).</p> <p>The project team is aware of the Hazardous Materials Commodity Flow Studies that the Arizona State Emergency Response Commission maintains. These studies are used by emergency response planners (such as the Arizona State Emergency Response Commission statewide and the Maricopa County Local Emergency Planning Commission for Maricopa County) as one of the elements considered when developing emergency response plans. Whenever a new road is introduced to an area, the jurisdiction with responsibility for maintaining that area's emergency response plan amends the plan to include the new facility. If the plan is amended, it is made available to the Arizona Department of Transportation.</p> <p>In the event of an incident with a hazardous materials issue on a State or federal highway, the emergency responders contact the Arizona Department of Transportation's Traffic Operations Center to report the incident. The Traffic Operations Center then contacts the Arizona Department of Transportation's Safety and Risk Management group, which responds to the accident scene and assesses needs in concert with the Incident Commander from the responding agency with jurisdiction. If requested, the Arizona Department of Transportation can assist cleanup activities by engaging specialty subcontractors with whom the Arizona Department of Environmental Quality has contracts for such support. The Arizona Department of Transportation's Safety and Risk Management group's charge is primarily public health protection, with cleanup support being secondary.</p> <p>According to 46 <i>Federal Register</i> 18026 (March 23, 1981), the environmental impact statement must discuss reasonably foreseeable actions. These are actions that are likely to occur or probable, rather than those that are merely possible.</p>

(Responses continue on next page)

Code	Comment Document

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5	Air Quality	Data and scientific methods used in the Draft Environmental Impact Statement were the most appropriate information available and considered state-of-the-practice respectfully throughout the environmental impact statement process. Beginning as early as 2004, methods, assumptions, and data sources were shared and confirmed with appropriate resource and regulatory agencies for the purposes of study. The dynamic aspect of the process led to modifications in alternatives’ design and locations which subsequently led to continuous validation pertinent to data, methods, and assumptions. This normal, accepted, and National Environmental Policy Act “allowed for” process has continued through the Final Environmental Impact Statement as represented in several sections with changed text. For example, Maricopa Association of Governments’ approved new population, employment, housing, and traffic projections (June 2013) was used to update information in chapters 1, 3 and 4. Other examples in the Final Environmental Impact Statement of updating methods, assumptions, and data include information associated with particulate matter (PM ₁₀) modelling being added to the section, <i>Air Quality</i> , beginning on page 4-68, more information regarding special status species being added to the section, <i>Biological Resources</i> , beginning on page 4-125, and results from the Jurisdictional Delineation of Waters of the United States being added to the section, <i>Waters of the United States</i> , beginning on page 4-116.
6	Alternatives	<p>The comment suggests the environmental impact statement process was biased by a history of property acquisitions within the Study Area. More specifically, properties falling within the limits of the Preferred Alternative, as identified in the Final Environmental Impact Statement, were targeted for acquisition.</p> <p>As noted in text on page 3-54 of the Final Environmental Impact Statement, the Arizona Department of Transportation began acquiring land for the original alignment in 1988. Between 1988 and 2001, the Arizona Department of Transportation acquired approximately 293 acres. Most of this land (258 acres) is located in the Eastern Section along Pecos Road. In 2006, the Arizona Department of Transportation began protective and hardship land acquisition in the alignment right-of-way footprint for the W59 and E1 Alternatives. Between 2006 and October 2013, the Arizona Department of Transportation purchased 326 acres (303 in the Western Section and 23 in the Eastern Section).</p> <p>The process for hardship and advanced acquisitions is explained in text on page 4-50.</p> <p>The comment infers that by taking such action, the objective equal consideration of the alternatives studied in detail in the Draft and Final Environmental Impact Statements is tainted. Advanced acquisitions in parallel to a National Environmental Policy Act environmental determination process is not unprecedented and is common practice. In this case, property acquisitions by the Arizona Department of Transportation for purposes of implementing the proposed action are done at risk as communicated to the agency by the Federal Highway Administration. If another action alternative were to be ultimately selected, the agency would likely have to place the acquired properties on the market for sale and purchase. The Arizona Department of Transportation attempts to balance the risk against its mission of timely delivery of transportation infrastructure to the driving public. Further, Federal Highway Administration regulations do not allow the ownership of right-of-way to be a factor in the decision regarding the selection of an alternative.</p>

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7	Hazardous Materials	The West Van Buren Water Quality Assurance Revolving Fund site was identified and considered during development of the Draft Environmental Impact Statement (see page 4-165 of the Final Environmental Impact Statement, and the Draft Initial Site Assessment prepared for the proposed project). These sites are primarily groundwater-impact sites, and groundwater is found at a depth of over 60 feet below the footprint of the Preferred Alternative. Given the separation distance between the adversely affected medium (groundwater) and the construction zone (near-surface in these locations), the project team determined that these sites would not pose a risk to construction or to the general public once the facility were completed. This assessment has been clarified in the Final Environmental Impact Statement on page 4-165.
8	Economics, Socioeconomics	A review of the literature reveals few detailed and comprehensive analyses of the relationship between transportation infrastructure and residential property values (Transportation Research Record: Journal of the Transportation Research Board, No. 2174, Transportation Research Board of the National Academies, Washington, D.C., 2010, pp. 138–47; "Impact of Highways on Property Values: Case Study of the Superstition Freeway Corridor"). A recent study by the California Department of Transportation concluded that freeway facilities did not substantially affect sales prices in residential areas adjacent to the facility. The study concluded that it is the visibility of the freeway that may influence selling price and not distance or noise. As a result, the researchers generally concluded that the more the visibility of a new freeway is reduced, the less it would determine the sales price of homes sold in the area.
9	Alternatives	<p>In accordance with the National Environmental Policy Act, a range of reasonable action alternatives to carry forward for further analysis was determined through application of multidisciplinary criteria in a logical, step-wise progression. Alternatives were not disposed of or dismissed without a thorough evaluation using the multidisciplinary criteria outlined in the systematic alternatives development and screening process presented in Chapter 3 of the Draft and Final Environmental Impact Statements. The Preferred Alternative was the outcome of this process.</p> <p>The 59th Avenue connection (W59 Alternative) with Interstate 10 (Papago Freeway) was seen as the best option to balance fiscal responsibility, regional mobility needs, community sensitivity, and additional considerations such as consistency with long-range planning goals, economic and environmental impacts, and public and agency input. The W101 Alternative would connect with State Route 101L, but would also result in substantial impacts on the community of Tolleson. While the South Mountain Citizens Advisory Team recommended the W101 Alternative, all stakeholders’ input was accounted for—including regional leaders, municipalities, members of the public, and members of the South Mountain Citizens Advisory Team—before identifying the W59 Alternative as the Preferred Alternative (see Final Environmental Impact Statement pages 3-62 and 3-68).</p>

Code	Comment Document

Code	Issue	Response
10	Environmental Justice	<p>Since the beginning of the environmental impact statement process, the Federal Highway Administration and Arizona Department of Transportation have been carrying out cultural resources studies and engaging in ongoing, open consultation with the Gila River Indian Community Tribal Historic Preservation Office regarding the identification and evaluation of places of religious and cultural importance to the tribe that may be adversely affected by the proposed freeway. Such places are referred to as traditional cultural properties. As a result of these discussions and of studies conducted by the Gila River Indian Community’s Cultural Resource Management Program, the Gila River Indian Community has identified traditional cultural properties that are eligible for listing in the National Register of Historic Places and that could be affected by construction of the proposed freeway. In certain cases, listing these properties on the National Register of Historic Places may offer them protection under Section 4(f) of the Department of Transportation Act. The traditional cultural properties identified are culturally important to other Native American tribes as well. For more discussion of traditional cultural properties, see the section, <i>Cultural Resources</i>, beginning on page 4-140 of the Final Environmental Impact Statement and pages 5-26 through 5-28.</p> <p>Section 106 of the National Historic Preservation Act requires a government-to-government relationship between the Federal Government and Indian tribes as described beginning on page 4-140 of the Final Environmental Impact Statement. Section 106 requires that federal agencies take into account the effects of their undertakings on historic properties. This process requires consultation with tribal authorities. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. The consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Register of Historic Places eligibility recommendations (including traditional cultural properties), project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.</p> <p>The Draft Environmental Impact Statement, after consultation and coordination efforts, accommodates and preserves (to the fullest extent possible from the available alternatives) access to the South Mountains for religious practices. A very small portion of the mountain would be impacted by the proposed freeway (less than 0.03 percent of the total area). Although the Draft Environmental Impact Statement describes the impact on the South Mountains as adverse, Native Americans would not be kept from practicing their beliefs, access to the mountain would be maintained, and mitigation measures would be implemented based on input from members of the Gila River Indian Community.</p>

Code	Comment Document
	<div>4394</div> <div><div><div>1 Okay, thank you.</div><div>2 THE FACILITATOR: Thank you.</div><div>3 If you'd like to speak and haven't registered</div><div>4 out front, please do so.</div><div>5 (The proceeding was at recess from 1:21 p.m. to</div><div>6 2:04 p.m.)</div><div>7 THE FACILITATOR: Good afternoon. I'd like to</div><div>8 introduce to you our 2:00 to 4:00 p.m. panel. With the</div><div>9 Arizona Department of Transportation, Brock Barnhart;</div><div>10 with the Federal Highway Administration, Roman Moreno,</div><div>11 and with the Arizona Department of Transportation, Brent</div><div>12 Cain.</div><div>13 We'd like to remind you that we discourage</div><div>14 applause.</div><div>15 Our next speaker is Lori Riddle.</div><div>16 MS. RIDDLE: I guess they had some short people</div><div>17 up here.</div><div>18 THE FACILITATOR: Welcome, Ms. Riddle. You have</div><div>19 three minutes.</div><div>20 MS. RIDDLE: Thank you. I'll try to talk fast.</div><div>21 I am a member of the Gila River Indian Community, I am</div><div>22 co-founder of Gila River Alliance for a Clean</div><div>23 Environment. I'm the sponsor of Gila River Environmental</div><div>24 Youth. I'm also a member of the PARC, Protecting Arizona</div><div>25 Resources and Children, as well as a number of other</div></div><div>Page 50</div><div>Driver and Nix Court Reporters - (602) 266-6525 www.drivernix.com</div></div>

Code	Issue	Response

Code	Comment Document
1	<p>1 organizations that is not in support of the freeway.</p> <p>2 The points I would like to make is, you know,</p> <p>3 people have been talking about the need to expand the</p> <p>4 transportation, when my people have survived centuries</p> <p>5 without a proper transportation system. Many of our</p> <p>6 community members don't have vehicles, they help each</p> <p>7 other out and they rely on other people, other family</p> <p>8 members for vehicle transportation needs.</p> <p>9 I feel that the DEIS is not complete, it does</p> <p>10 not include the J-tap study that the U.S. EPA Region 9</p> <p>11 did a few decades ago. It doesn't include the air</p> <p>12 monitoring study that was done in Gila River. There's a</p> <p>13 few studies that are mentioned and referred to, but it</p> <p>14 doesn't include those things, so I feel like it's an</p> <p>15 incomplete study and I don't feel like we need to comment</p> <p>16 on an incomplete study. It's biased. As I have always</p> <p>17 told my community members, these studies usually go favor</p> <p>18 on the side of where the money is.</p> <p>19 One of my friends had mentioned about the</p> <p>20 biocarbon study and the animal-plants study, that's</p> <p>21 another issue that we've been noticing in Gila River is</p> <p>22 the disappearance of some of our prominent plants and</p> <p>23 animals. There's plants that we don't see anymore that</p> <p>24 used to be abundant on our reservation -- I see my time's</p> <p>25 winding down.</p> <p>Page 51</p> <p>Driver and Nix Court Reporters - (602) 266-6525 www.drivernix.com</p>

Code	Issue	Response
1	Air Quality	<p>Summary information about the findings of the Joint Air Toxics Assessment Project study is provided as background information in the Draft and Final Environmental Impact Statements, but the study itself is not relevant to the type of analysis done pursuant to the Federal Highway Administration's mobile source air toxics guidance, which is an emissions analysis. Monitored ambient concentrations of mobile source air toxics (the focus of the Joint Air Toxics Assessment Project) do not inform this type of analysis. While monitoring data can be useful for defining current conditions in the affected environment (to the extent that the monitoring data are current), they don't tell us anything about future conditions, or the impacts of the project itself, which is why an emissions analysis was performed. The mobile source air toxic analysis presented beginning on page 4-77 of the Final Environmental Impact Statement is an estimated inventory of mobile source air toxic emissions for the entire Study Area for 2025 and 2035. This approach was used because the inventory estimate accounts for changes in traffic and emissions on all roadways affected by a proposed project, and would, therefore, be a more reliable predictor of changes in exposure to mobile source air toxics.</p> <p>Several studies on the health effects of emissions and traffic are found in the Draft Environmental Impact Statement on page 4-75. The Draft Environmental Impact Statement does not disclose all studies on the subject nor does it disclose the studies in their entirety. As stated in the Council on Environmental Quality's Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act, environmental impact statements should be analytic rather than encyclopedic [40 Code of Federal Regulations Part 1502.2(a)]. The discussion included in the Draft Environmental Impact Statement appropriately illustrates studies on the subject are ongoing and to date, specific subject matter and study findings have varied.</p>
2	Biology, Plants, and Wildlife	<p>Within the context of overall vegetation, wildlife, and wildlife habitat, all action alternatives and options would decrease the amount of cover, nesting areas, and food resources for wildlife species caused by habitat loss, fragmentation, and traffic disturbance. See the section, <i>General Impacts on Vegetation, Wildlife, and Wildlife Habitat</i>, beginning on page 4-136 of the Final Environmental Impact Statement, for additional details on potential effects on vegetation, wildlife, and wildlife habitat.</p> <p>The Arizona Department of Transportation and Federal Highway Administration completed a Biological Evaluation containing analysis of the project effects on listed and candidate species under the Endangered Species Act. The Biological Evaluation was completed in 2014 following identification of the Preferred Alternative in the Draft Environmental Impact Statement. The Biological Evaluation was sent to the U.S. Fish and Wildlife Service, Arizona Game and Fish Department, and Gila River Indian Community Department of Environmental Quality for technical assistance with assessing the level of project effects on listed and candidate species prior to completion of the Final Environmental Impact Statement. The Arizona Department of Transportation and Federal Highway Administration have committed to continue coordination with the Arizona Game and Fish Department, Gila River Indian Community Department of Environmental Quality, and U.S. Fish and Wildlife Service regarding wildlife concerns as a result of the freeway's potential implementation. The results of the Biological Evaluation may be found beginning on page 4-125 of the Final Environmental Impact Statement.</p> <p>Text beginning on page 4-85 of the Final Environmental Impact Statement discusses the relationship and the contribution of the proposed action to Greenhouse Gas Emissions (Climate Change). In short, Federal Highway Administration has</p>

(Response 2 continues on next page)

Code	Comment Document
3	<p>1 The amount of money that we're spending on this</p> <p>2 freeway, 100 million per, what was it, mile, that's</p> <p>3 outrageous, not to mention the \$20 million to complete</p> <p>4 this DEIS. People keep talking about cutting down on</p> <p>5 pollution, but what about the pollution in our community?</p> <p>6 Do we not matter? The air that we breathe, is our air</p> <p>7 any less important than the people of Phoenix? When are</p> <p>8 we going to actually matter? When are those</p> <p>9 considerations going to happen?</p> <p>10 And you're blasting through sacred mountain that</p> <p>11 is religious and sacred to our people. I can't elaborate</p> <p>12 on that because my time is out, but I just want to</p> <p>13 mention that that is significant to our people.</p> <p>14 THE FACILITATOR: Thank you, Ms. Riddle.</p> <p>15 Our next speaker is David Martin. We welcome</p> <p>16 David Martin.</p> <p>17 Welcome, Mr. Martin.</p> <p>18 MR. MARTIN: Thank you.</p> <p>19 THE FACILITATOR: You have three minutes.</p> <p>20 MR. MARTIN: Thank you. Members of the panel,</p> <p>21 for the record, my name is David Martin, I sort of have</p> <p>22 multiple hats here today. I am the president of the</p> <p>23 Associated General Contractors, I chair an organization</p> <p>24 called We Build Arizona, and I am an Ahwatukee resident,</p> <p>25 so I sort of wear three hats.</p> <p>Page 52</p> <p>Driver and Nix Court Reporters - (602) 266-6525 www.drivernix.com</p>

Code	Issue	Response
2 (cont.)		concluded, based on the nature of greenhouse gas emissions and the exceedingly small potential greenhouse gas impacts of the proposed action that such emissions from the proposed action would not result in reasonably foreseeable substantial adverse impacts on the human environment.
3	Air Quality	<p>The Final Environmental Impact Statement addresses the history of air quality in the region (see text beginning on page 4-68 of the Final Environmental Impact Statement). The Clean Air Act § 109(b)(1) requires the U.S. Environmental Protection Agency to promulgate primary National Ambient Air Quality Standards at levels that allow an adequate margin of safety to protect the public health. Air quality in the Phoenix metropolitan area has improved over time; Phoenix was redesignated to attainment/maintenance for carbon monoxide in 2005, and the U.S. Environmental Protection Agency recently determined that Phoenix has attained the particulate matter (PM₁₀) standard. These improvements are largely associated with cleaner fuels and lower-emission vehicles along with local controls on fugitive dust. Future emissions would also be reduced by the use of cleaner burning fuels, technological advances in automotive design (including the greater use of alternative fuel vehicles), reformulated gasoline, gas can standards, stricter enforcement of emission standards during inspections, heavy-duty diesel engine and on-highway diesel sulfur control programs, dust control programs, and others.</p> <p>The air quality assessment for the proposed freeway analyzed impacts from carbon monoxide and particulate matter (PM₁₀) and followed U.S. Environmental Protection Agency guidelines. The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones. For mobile source air toxics, the analysis showed that for the Study Area, constructing the freeway would have a marginal effect on annual emissions in 2025 and 2035 (less than a 1 percent difference in total annual emissions between the Preferred Alternative and No-Action Alternative). With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions. The air quality analyses were updated for the Final Environmental Impact Statement, including a quantitative particulate matter (PM₁₀) analysis, and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement.</p> <p>Congestion relief resulting from the proposed freeway would provide localized air quality emissions reductions on area freeways and arterial streets and at interchanges, benefiting users of area highways and those living near congested roads.</p> <p>Fugitive dust and mobile source emissions from construction of the proposed freeway would be controlled by requiring the contractor to comply with the dust-control methods in Arizona Department of Transportation's <i>Standard Specifications for Road and Bridge Construction</i> (2008) and Maricopa County Rule 310, Fugitive Dust Ordinance. Disruption to traffic, especially during peak travel periods, would be minimized by a traffic control plan to help reduce impacts of traffic congestion and associated emissions during construction. These methods are discussed on page 4-85 of the Final Environmental Impact Statement.</p>

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4	Cultural Resources	<p>Since the beginning of the environmental impact statement process, the Federal Highway Administration and Arizona Department of Transportation have been carrying out cultural resource studies and engaging in an ongoing, open dialogue with the Gila River Indian Community Tribal Historic Preservation Office regarding the identification and evaluation of places of religious and cultural importance to the Gila River Indian Community that may be adversely affected by the proposed freeway. Such places are referred to as traditional cultural properties. As a result of these discussions and of studies conducted by the Gila River Indian Community's Cultural Resource Management Program, the Gila River Indian Community has identified traditional cultural properties that are eligible for listing in the National Register of Historic Places and that could be affected by construction of the proposed freeway. In certain cases, listing these properties on the National Register of Historic Places may offer them protection under Section 4(f) of the Department of Transportation Act. The traditional cultural properties identified are culturally important to other Native American tribes as well. For more discussion of traditional cultural properties, see the section, <i>Cultural Resources</i>, beginning on page 4-140 of the Final Environmental Impact Statement and pages 5-26 through 5-28.</p> <p>Section 106 of the National Historic Preservation Act requires a government-to-government relationship between the Federal Government and Indian tribes as described beginning on page 4-140 of the Final Environmental Impact Statement. Section 106 requires that federal agencies take into account the effects of their undertakings on historic properties. This process requires consultation with tribal authorities. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. The consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Register of Historic Places eligibility recommendations (including traditional cultural properties), project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed. Public involvement with the Gila River Indian Community was conducted as requested by the tribal government. Prior to October 2005, early efforts to involve the Gila River Indian Community included attending tribal meetings and monthly meetings with Gila River Indian Community Departments (see discussion beginning on page 2-8 of the Final Environmental Impact Statement). On October 14, 2005, the Gila River Indian Community requested that all project-related communications take place at a government-to-government level (see letter on page A152 of Appendix 1-1). This request was honored by the Arizona Department of Transportation and Federal Highway Administration. All public involvement efforts were implemented by the Gila River Indian Community's public involvement officer.</p>

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1	MS. RIDDLE: Okay. My name is Lori
2	Riddle. I'm the co-founder of Grace Gila River
3	Alliance for a Clean Environment, and I'm sponsored
4	for GREY, that's Gila River Environmental Youth. I'm
5	also a member of PARC, Protecting Arizona Resources
6	and Children. I am a community member that lives
7	here in the community. So just a few things that I'd
8	like to mention, and I'll be doing my own written
9	that I'll e-mail to the address.
10	Well, the first thing I want to touch on
11	is the fact that the health impacts are not really
12	addressed in this EIS. There are numerous health
13	impacts that studies have shown in other states and
14	other cities. You know, I mean, we're talking about
15	an increase of heart attacks and strokes, we're
16	talking about cancer, we're talking about development
17	issues with unborn babies, miscarriages and
18	stillborns.
19	So in my written comment, I'll go ahead
20	and reference some things directly related to that.
21	The other thing I would like to mention is the animal
22	impact. We're talking about rains that would wash
23	some of the fluids from vehicles into the pathway or
24	into the areas where animals drink from. And with
25	those -- those different type of fluids would be like
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Code	Issue	Response
1	Health Effects	<p>Under the Clean Air Act, the U.S. Environmental Protection Agency is responsible for establishing National Ambient Air Quality Standards to protect public health and the environment from adverse effects of air pollutants. Health effects from air pollutants are based on the concentration of the pollutants and the duration of exposure. Concentrations vary with distance from a roadway based on many factors, including background (or ambient) levels of pollution from all sources; the number, speed, and type of vehicles on the roadway; wind speed and direction; topography; and other factors. For the proposed freeway, the Federal Highway Administration conducted modeling for carbon monoxide and particulate matter (PM₁₀) using worst-case (most congested or highest traffic) modeling locations at discrete receptor locations around each analysis location (primarily residences near the interchanges). The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones.</p> <p>Mobile source air toxics can also have adverse health impacts, but the U.S. Environmental Protection Agency has not established National Ambient Air Quality Standards for these pollutants. As a result, the Federal Highway Administration analyzes these pollutants using emissions analyses. The mobile source air toxics emissions analysis for the Study Area found little difference in total annual emissions of mobile source air toxics emissions between the Preferred and No-Action Alternatives (less than a 1 percent difference) in 2025 and 2035. With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions.</p> <p>Many studies have investigated the prevalence of adverse health effects in the near-road environment. Given concerns about the possibility of air pollution exposure in the near-road environment, the Health Effects Institute has dedicated a number of research efforts toward investigating this issue. In November 2007, the Health Effects Institute published Special Report #16: Mobile-Source Air Toxics: A Critical Review of the Literature on Exposure and Health Effects. This report concluded that the cancer health effects attributable to mobile sources are difficult to discern because the majority of quantitative assessments are derived from occupational cohorts with high concentration exposures and because some cancer potency estimates are derived from animal models. In January 2010, the Health Effects Institute released Special Report #17, investigating the health effects of traffic-related air pollution. The goal of the research was to synthesize available information on the effects of traffic on health. Researchers looked at linkages between: 1) traffic emissions (at the tailpipe) with ambient air pollution in general, 2) concentrations of ambient pollutants with human exposure to pollutants from traffic, 3) exposure to pollutants from traffic with human-health effects and toxicological data, and 4) toxicological data with epidemiological associations. Overall, researchers felt that there was “sufficient” evidence for causality for the exacerbation of asthma. Evidence was “suggestive but not sufficient” for health outcomes such as cardiovascular mortality and others. Study authors also noted that past epidemiological studies may not provide an appropriate assessment of future health associations because vehicle emissions are decreasing over time. Finally, in 2011 three studies were published by the Health Effects Institute evaluating the potential for mobile source air toxics “hot spots.” In general, the</p>

(Response 1 continues on next page)

Code	Comment Document
	<div>1 radiator fluid, oils, anything dripping from the</div> <div>2 vehicles that will be on the roadway. And once the</div> <div>3 rains hit that and washes it down into the area where</div> <div>4 the habitat is, I have a big problem with that. Not</div> <div>5 to mention that the desert tortoise is up for</div> <div>6 consideration for under the endangered species.</div> <div>7 The plant impact, we're talking about</div> <div>8 plants that we consider are medicinal plants both for</div> <div>9 our medicine and healing uses, as well as sustenance.</div> <div>10 You know, things that are edible that we've eaten for</div> <div>11 -- for years that not only will the waters wash to</div> <div>12 the animals, it will wash to plants and it would</div> <div>13 directly impact those things.</div> <div>14 I have an issue with this so-called</div> <div>15 consultation with the tribe. In section 2 of the</div> <div>16 DEIS, there's a list of meetings, but where was the</div> <div>17 public notification with that? We didn't see</div> <div>18 posters. We didn't see announcements in our tribal</div> <div>19 newsletter.</div> <div>20 So, you know, the other thing too is when</div> <div>21 we had TTT meetings a month or so ago, technical</div> <div>22 transportation team meeting, we were told that there</div> <div>23 was going to be bus -- free bus services for</div> <div>24 community members. I tried calling the number that's</div> <div>25 listed for ADOT and I got -- I kept getting a message</div>
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Code	Issue	Response
1 (cont.)		<p>authors confirmed that while highways are a source of air toxics, they were unable to find that highways were the only source of these pollutants. They determined that near-road exposures were often no different or no higher than background (or ambient) levels of exposure and, hence, no true hot spots were identified. These reports are available from the Health Effects Institute's Web site at <healtheffects.org>. The Federal Highway Administration and U.S. Environmental Protection Agency provide financial support to the Health Effects Institute's research work. Another source of information is the U.S. Environmental Protection Agency's recently released report on Children's Health and the Environment:</p> <p><i>The level of knowledge regarding the relationship between environmental exposures and health outcomes varies widely among the topics [presented in this report], and the inclusion of an indicator in the report does not necessarily imply a known relationship between environmental exposure and children's health effects. The report provides data for selected children's health conditions that warrant further research because the causes, including possible contributing environmental factors, are complex and not well understood at this point.</i></p> <p><i>In the case of asthma, researchers do not fully understand why children develop the condition. However, substantial evidence shows exposure to certain air pollutants, including particulate matter and ozone, can trigger symptoms in children who already have asthma. Although the report found the percentage of children reported to currently have asthma increased from 8.7 percent in 2001 to 9.4 percent in 2010 and that minority populations are particularly affected by asthma, the severity of children's asthma and respiratory symptoms has declined. The rate of emergency room visits for asthma decreased from 114 visits per 10,000 children in 1996 to 103 visits per 10,000 children in 2008. Between 1996 and 2008, hospitalizations for asthma and for all other respiratory causes decreased from 90 hospitalizations per 10,000 children to 56 hospitalizations per 10,000 children.</i></p> <p><i>The report also looks at trends in other health conditions, such as Attention-Deficit/Hyperactivity Disorder (ADHD) and preterm births, for which rates have increased. There is no conclusive information on the role of environmental contaminants in ADHD or preterm births, and additional research is ongoing.</i></p> <p>Finally, the Federal Highway Administration notes that while the incidence of some health effects (such as asthma, autism, and attention deficit/hyperactivity disorder) in the U.S. population appear to have been increasing, motor vehicle emissions have declined. This decline in mobile source air toxics emissions is documented in Figure 4-24 of the Final Environmental Impact Statement and for other pollutants at <epa.gov/ttn/chief/trends/>. This negative correlation between emissions trends and health effects trends illustrates the complexity of the issues.</p>
2	Biology, Plants, and Wildlife	<p>Impacts on biological resources are described in text beginning on page 4-125 of the Final Environmental Impact Statement. Various mitigation strategies presented in the Final Environmental Impact Statement will be implemented to reduce water quality impacts. For example, as noted in text on page 3-58 of the Final Environmental Impact statement drainage features will be constructed to specific design standards to reduce and control the amount of pollutant loading in drainage leaving the roadway. Further, the permitting processes described in the sections, <i>Water Resources</i> and <i>Waters of the United States</i>, beginning on pages 4-101 and 4-116, respectively, outline procedures to mitigate water quality impacts during construction and operation of the freeway. Finally, on page 4-108 of the Final</p>

Code	Comment Document
6	<p>1 saying the box is full and if I -- when I finally did</p> <p>2 leave a message, I left a message for someone to</p> <p>3 return my call and this was the week prior to the</p> <p>4 hearing in Phoenix at the convention center. No one</p> <p>5 returned my call. And when I approached a MAG</p> <p>6 member, Maricopa Association of Governments member,</p> <p>7 he shrugged his shoulders like it wasn't important</p> <p>8 and he said, "Oh, well, it's too late now." So I</p> <p>9 mean, the consultation and the communication has been</p> <p>10 a problem.</p> <p>11 I do have a problem with the design of</p> <p>12 the casino. The fact that there are no accessible</p> <p>13 routes to our community. This is because I sit on</p> <p>14 the CTERC commission for my community, it's Chemical</p> <p>15 Tribal Emergency Response Commission. And so the</p> <p>16 first responders would have a difficult time going</p> <p>17 into the freeway if there are less exits and</p> <p>18 entrances to the freeway. So, you know, it would be</p> <p>19 time-consuming in a life-saving event to try to find</p> <p>20 which -- which exit is the closest, you know,</p> <p>21 especially in an area that doesn't have access.</p> <p>22 The other thing is, there are no frontage</p> <p>23 roads provided, you know. No roads that we can</p> <p>24 utilize as the local community to -- to get from</p> <p>25 point A to point B without using a freeway itself.</p>
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7	

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2 (cont.)		Environmental Impact Statement, to reduce the potential impact of contaminants such as oil, grease, soil, and trash, settling basins would be used to collect water and allow materials to settle. These settling basins would require periodic cleaning and would be accredited as part of the Statewide Stormwater Management Program.
3	Biology, Plants, and Wildlife	A Biological Evaluation was submitted to the U.S. Fish and Wildlife Service, Arizona Game and Fish Department, and Gila River Indian Community Department of Environmental Quality that addressed threatened, endangered, and candidate species, including the Sonoran desert tortoise. The U.S. Fish and Wildlife Service concurred with the species determinations in the Biological Evaluation (see Appendix 1-1 of the Final Environmental Impact Statement). The Arizona Department of Transportation and Federal Highway Administration have committed to continue coordination with the Arizona Game and Fish Department, Gila River Indian Community personnel, and U.S. Fish and Wildlife Service regarding wildlife concerns as a result of the freeway's potential implementation.
4	Biology, Plants, and Wildlife	Within the context of overall vegetation, wildlife, and wildlife habitat, all action alternatives and options would decrease the amount of cover, nesting areas, and food resources for wildlife species caused by habitat loss, fragmentation, and traffic disturbance. See the section, <i>General Impacts on Vegetation, Wildlife, and Wildlife Habitat</i> , beginning on page 4-136 of the Final Environmental Impact Statement, for additional details on potential effects on vegetation, wildlife, and wildlife habitat. The Arizona Department of Transportation and Federal Highway Administration have committed to continue coordination with the Arizona Game and Fish Department, Gila River Indian Community personnel, and U.S. Fish and Wildlife Service regarding wildlife concerns as a result of the freeway's potential implementation.
5	Public Involvement	<p>Public involvement with the Gila River Indian Community was conducted as requested by the tribal government. Prior to October 2005, early efforts to involve the Gila River Indian Community included attending tribal meetings and monthly meetings with Gila River Indian Community Departments (see discussion beginning on page 2-8 of the Final Environmental Impact Statement). In addition, representatives from the Gila River Indian Community participated for years in the South Mountain Citizens Advisory Team. On October 14, 2005, the Gila River Indian Community requested that all project-related communications take place at a government-to-government level (see letter on page A152 of Appendix 1-1). This request was honored by the Arizona Department of Transportation and Federal Highway Administration. All public involvement efforts were implemented by the Gila River Indian Community's public involvement officer.</p> <p>It is also important to note that the Gila River Indian Community's Lieutenant Governor is a member of the Transportation Policy Committee of the Maricopa Association of Governments, which oversees the development of the 20-year <i>Regional Transportation Plan</i> and guides transportation planning in the region. See Chapter 6, <i>Comments and Coordination</i>, of the Final Environmental Impact Statement for more information related to the outreach to members of the public, including members of the Gila River Indian Community throughout the environmental impact statement process.</p>
6	Public Involvement	The Arizona Department of Transportation advertisement efforts of the public hearing and public forums are documented in Chapter 6 of the Final Environmental Impact Statement beginning on page 6-23. The Gila River Indian Community Communication and Public Affairs Office informed the Arizona

(Response 6 continues on next page)

Code	Comment Document
1	<div><p>1 So, the air impacts. I understand that</p><p>2 the air would be cleaner in the Phoenix metropolitan</p><p>3 area, but all it's going to do is move the air</p><p>4 pollution into our community. It's going to be</p><p>5 excessive pollution because of the terrain of the</p><p>6 area. Because we have two mountains as walls on the</p><p>7 north and south side. So these things, I mean,</p><p>8 they're heavy-duty things.</p><p>9 We're talking about dioxin furans which</p><p>10 is cancer-causing. It's basically like Agent Orange.</p><p>11 We're talking about particulate matter 2.5 microns</p><p>12 and 10 microns that causes heart attacks and strokes</p><p>13 because you breathe it into your lungs and it gets</p><p>14 deep into your lungs and it starts affecting your</p><p>15 heart. We're talking about carbon monoxide, we're</p><p>16 talking about a multitude of other things and so that</p><p>17 concerns me.</p><p>18 Also I mentioned earlier about water --</p><p>19 about the water impact, about the drainage off of the</p><p>20 freeway and how it will be accessible for animals and</p><p>21 plants to be utilizing that water. There's no catch,</p><p>22 you know. And plus too we're talking about having</p><p>23 the freeway next to Ahwatukee community. I mean,</p><p>24 it's going to eventually get into some water sheds</p><p>25 and eventually get into a community drinking system.</p></div> <div>Page 29</div> <div>Driver and Nix Court Reporters - (602) 266-6525 www.drivernix.com</div>

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6 (cont.)		<p>Department of Transportation that all communication and distribution of informational materials on Gila River Indian Community land would be handled by the Communication and Public Affairs Office. Advertisement text regarding the project, the public comment period, the public hearing and the various ways for the public to submit comments regarding the South Mountain Freeway Draft Environmental Impact Statement was given to the Gila River Indian Community's Public Information Officer at the Transportation Technical Team meeting on April 30, 2013. Two advertisements regarding the public hearing, information regarding the location and availability of the Draft Environmental Impact Statement, and a map of the alternatives was placed in the May 2013 monthly issue of the <i>Gila River Indian News</i>.</p> <p>The Arizona Department of Transportation Community Relations distributed electronic notices (e-newsletters) through the Government Delivery system to over 12,000 constituents who voluntarily signed up for project alerts along the Interstate 10 Papago, Maricopa, and Santan Freeways. These electronic notices included notice of availability of Draft Environmental Impact Statement (distributed on April 26, 2013); public hearing (distributed on May 10, 2013); the community forums (distributed on May 29, 2013) and one in June (close of the Draft Environmental Impact Statement public comment period). In addition, anyone who had attended a previous meeting on the proposed action and signed in received all of this information mailed individually. On May 6, 2013, 73,564 mailers were distributed to addresses within the Study Area.</p> <p>The Arizona Department of Transportation provided vouchers for public hearing parking and for public transit to the hearing. For the first time in the State's history, a shuttle bus to the hearing was provided from six locations in the Phoenix area, including two on the Gila River Indian Community (Komatke Boys & Girls Club and the Governance Center in Sacaton). All ads provided telephone numbers and electronic contact information regarding information on the shuttle schedules and pick-up locations.</p>
7	Design	<p>Traffic interchanges (on- and off-ramps) would be located at Van Buren Street, Buckeye Road, Lower Buckeye Road, Broadway Road, Southern Avenue, Baseline Road, Dobbins Road, Elliot Road, 51st Avenue, 17th Avenue, Desert Foothills Parkway, 24th Street, and 40th Street. Emergency responders would address the construction of the proposed freeway by amending the local emergency response plan to include the facility. Information related to this is presented on page 4-166 of the Final Environmental Impact Statement. Local traffic can continue to use existing roads to get from point A to point B.</p> <p>Frontage roads would increase the footprint of the Preferred Alternative and would result in greater social, economic, and environmental impacts. Therefore, frontage roads are not a part of the Preferred Alternative.</p>
8	Groundwater	<p>Impacts on groundwater are addressed in the Final Environmental Impact Statement, <i>Water Resources</i> section. The Study Area is located within two Active Management Areas that are regulated by the State of Arizona. The Arizona Department of Water Resources administers groundwater use. Water level decline in one subbasin can be offset by recharging water in another subbasin of the Active Management Area. The Arizona Department of Water Resources regulates drilling, installation, and abandonment of groundwater wells. (See Final Environmental Impact Statement page 4-104). If a well were adversely affected by construction activities, the well might need to be abandoned or the well owner would be compensated by drilling a new well according to State regulations/standards. (See the text box on Final Environmental Impact Statement page 4-108.)</p>

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1 The studies regarding health impacts. I
2 mean, there was a study in Utah, the state of Utah.
3 Was done by the Sierra Club and impacts the people
4 there living near freeways. There's also been
5 studies in the L.A. area about the impacts to the
6 people there and to the children. I believe there
7 was even a study in the metropolitan Phoenix area. I
8 believe it was in the north, northwest side of
9 Phoenix, and I'll reference all these in more detail
10 on my -- on my written comment. But just bringing up
11 the fact that there's a multitude of health issues
12 that we need to be looking at. And I think that's it
13 right now.

14 (The proceedings concluded at 12:00 p.m.)

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		Responses to specific comments are provided on the following pages.

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	<div><div><div><div><div></div><div></div></div><div><div>From:</div><div>To:</div><div>Cc:</div><div>Subject:</div><div>Date:</div><div>Attachments:</div></div><div><div>contaminatedinaz@yahoo.com</div><div>Projects</div><div>Brad Angel: Monica Fish</div><div>GRACE comments to DEIS part 1 of 3</div><div>Wednesday, July 24, 2013 5:50:48 PM</div><div>GRACE Comments to ADOT 7.24.13.doc ATT00001.txt</div></div></div></div><div><div></div><div></div></div><div>Lori Riddle 520-610-3405</div></div>


Code	Issue	Response

Code	Comment Document
	<p>July 24, 2013</p> <p>South Mountain Study Team Arizona Department of Transportation 1655 West Jackson Street, MD 126F Phoenix, Arizona 85007 projects@azdot.gov</p> <p>(via email)</p> <p>COMMENTS IN OPPOSITION TO THE PROPOSED SOUTH MOUNTAIN LOOP 202</p> <p>The Gila River Alliance for a Clean Environment (GRACE), a grassroots organization of the Akimel O’odham, (River People) and Maricopa (Pee Posh) indigenous peoples of the Gila River Indian Community (GRIC), submits these comments to the Arizona Department of Transportation (ADOT) in opposition to the South Mountain Loop on behalf of our tribal members that would be negatively and disparately impacted by the proposed project.</p> <p>“No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.”¹ The GRIC, as a protected class of people, was discriminated against by:</p> <ul style="list-style-type: none">• ADOT knowingly and purposely designing the South Mountain Loop 202 through our sacred South Mountain, recognizing and acknowledging that the South Mountain Loop 202 would have a serious and major disparate impact on us as a nation both culturally and spiritually.• ADOT’s reason a purpose and need for the DEIS with inaccurate estimates of population projections, alleged uses of the South Mountain Loop 202.• ADOT’s failure to analyze the South Mountain Loop 202’s disparate environmental, economic, and health impacts on the GRIC.• ADOT’s inadequate consultation and informed consent, notice, and meaningful participation in the DEIS scoping and planning. <p>We urge ADOT to abide by Title VI and comply with state and federal civil rights mandates, to follow applicable laws, and reject the South Mountain Loop 202.</p> <p>¹ 42 U.S.C § 2000d</p> <p>Gila River Alliance for a Clean Environment P.O. Box 11217 Bapchule Az 85121 529-610-3405 contaminatedinaz@yahoo.com</p>

Code	Issue	Response
		Responses to specific comments are provided on the following pages.

Code	Comment Document
	<p>Attached are our full comments that include an addendum of tribal member comments that have been incorporated into our comments, and our Title VI Civil Rights Complaint that will be filed with the Federal Transit Administration Office of Civil Rights.</p> <p>Sincerely,</p> <p>Lori Riddle, GRACE Co-Founder P.O. Box 11217 Bapchule Az 85121 contaminatedinaz@yahoo.com</p> <p>Gila River Alliance for a Clean Environment P.O. Box 11217 Bapchule Az 85121 529-610-3405 contaminatedinaz@yahoo.com</p>

Code	Issue	Response

Code	Comment Document
	<div style="text-align: right;">  </div> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Gila River Alliance for a Clean Environment; COMPLAINT UNDER TITLE VI OF THE CIVIL RIGHTS ACT OF 1964</p> <p>Complainant,</p> <p>v,</p> <p>Arizona Department of Transportation,</p> <p>Respondent.</p> </div> <p style="text-align: center; margin-top: 20px;">I. INTRODUCTION</p> <p>This is a civil rights complaint by the Gila River Alliance for a Clean Environment (hereinafter "GRACE,"), comprised of Akimel O'odham, (River People) and Maricopa (Pee Posti) indigenous peoples of the Gila River Indian Community (hereinafter "GRIC,") under Title VI of the United States Civil Rights Act¹ against the Arizona Department of Transportation (hereinafter "ADOT") for its discrimination in the form of unequal treatment and unequal impact against GRIC members based on race. As indigenous people of the American Indian race, Complainants are people protected by Title VI.</p> <p>As a recipient of Federal highway funding, ADOT is subject to Title VI of the United States Civil Rights Act.</p> <p>Complainant alleges that ADOT violated Title VI of the United States Civil Rights Act by the following actions:</p> <p>A. On April 26, 2013 ADOT released a Draft Environmental Impact Study (DEIS) identifying its proposal and preferred alternative for building a major highway -the South Mountain Loop 202- that would go through and desecrate a mountain held sacred by tribal members including members of GRACE, and is taking further action to complete the proposal and approve the project, despite being fully aware of and acknowledging the sacredness and spiritual and cultural significance of the mountain, that if implemented would have a profound negative impact on the cultural and spiritual well-being of the tribal members/indigenous peoples who are members of GRACE and would cause major cumulative health effects from toxic and criteria pollutants emitted by cars and trucks;</p> <p>B. discriminated in its public participation process toward tribal members including members of GRACE by providing less public participation opportunities to tribal members than non-tribal members, despite the fact that the proposed highway project would disproportionately impact tribal members.</p> <p><small>¹ "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." 42 U.S.C § 2000d.</small></p>

Code	Issue	Response
1	Title VI	Since Gila River Alliance for a Clean Environment's Title VI complaint was received during the public comment period for the Draft Environmental Impact Statement, it has been included as a part of the Comment and Response appendix. However, it should be noted that the National Environmental Policy Act process is separate from the U.S. Department of Transportation Title VI complaint process.
2	Title VI	Specific comments are addressed below.
3	Cultural Resources	<p>Since the beginning of the environmental impact statement process, the Federal Highway Administration and Arizona Department of Transportation have been carrying out cultural resource studies and engaging in an ongoing, open dialogue with the Gila River Indian Community Tribal Historic Preservation Office regarding the identification and evaluation of places of religious and cultural importance to the Gila River Indian Community that may be adversely affected by the proposed freeway. Such places are referred to as traditional cultural properties. As a result of these discussions and of studies conducted by the Gila River Indian Community's Cultural Resource Management Program, the Gila River Indian Community has identified traditional cultural properties that are eligible for listing in the National Register of Historic Places and that could be affected by construction of the proposed freeway. In certain cases, listing these properties on the National Register of Historic Places may offer them protection under Section 4(f) of the Department of Transportation Act. The traditional cultural properties identified are culturally important to other Native American tribes as well. For more discussion of traditional cultural properties, see the section, <i>Cultural Resources</i>, beginning on page 4-140 of the Final Environmental Impact Statement and pages 5-26 through 5-28.</p> <p>Section 106 of the National Historic Preservation Act requires a government-to-government relationship between the Federal Government and Indian tribes as described beginning on page 4-140 of the Final Environmental Impact Statement. Section 106 requires that federal agencies take into account the effects of their undertakings on historic properties. This process requires consultation with tribal authorities. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. The consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Register of Historic Places eligibility recommendations (including traditional cultural properties), project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.</p>
4	Air Quality	The air quality assessment for the proposed freeway analyzed impacts from carbon monoxide and particulate matter (PM ₁₀) and followed U.S. Environmental Protection Agency guidelines. The carbon monoxide and particulate matter (PM ₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones. For mobile source air toxics, the analysis showed that for the Study Area, constructing the freeway would have a marginal effect on annual emissions in 2025 and 2035 (less than a 1 percent difference in total annual emissions between the Preferred Alternative and No-Action Alternative). With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012

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Code	Comment Document
6	<p>II. TITLE VI OF THE CIVIL RIGHTS ACT OF 1964</p> <p>To succeed in this Civil Rights complaint, the complainant does not have to show that there was a deliberate, intentional discrimination by ADOT, but rather, that there is a discriminatory effect / disparate impact that gives rise to a section 601 Title VI of the Civil Rights Act of 1964 violation. Section 601 of Title VI of the Civil Rights Act of 1964 states that “No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.”² Section 602 of Title VI states: “Each Federal department and agency which is empowered to extend Federal financial assistance to any program or activity³...is authorized and directed to effectuate the provisions of section 601”⁴</p> <p>Section 602 prohibits recipients of federal funds to engage in any activities that result in discriminatory effect or disparate impact against individuals, groups of people, or whole communities of a certain race, color, or national origin.⁵ The discriminatory effect / disparate impact can occur when a seemingly neutral decision or action results in an unjustifiable adverse effect. Or in other words, an inaction or action by a recipient of federal funds that may appear neutral on its face and is not accompanied with any intent to discriminate, but nevertheless negatively affects an individual, groups of people, or a whole community of a certain race, color, or national origin, without any substantial legitimate justification, violates Title VI.</p> <p>The actions of ADOT were clearly not neutral and were made with total awareness and acknowledgement that the proposed freeway route through the sacred mountain would have serious negative cultural, spiritual and health impacts on a protected class of people.</p> <p>III. THE COMPLAINANTS</p> <p>Complainant GRACE is a grassroots organization of the Akimel O’odham, (River People) and Maricopa (Pee Posh) indigenous peoples of the GRIC. The GRIC’s reservation abuts the proposed project site, the GRIC and its people including the complainant have strong cultural and spiritual ties to South Mountain and they use the project site for cultural and spiritual purposes. Under Title VI, Native Americans are a protected class and historically have been discriminated against by the US government</p> <p>GRACE advocates for the protection of the environment and the sacred and cultural sites of the Gila River Indian Community and its people.⁶ Its mission is “to inform Indigenous peoples on environmental issues affecting their communities.”⁷ GRACE was formed in the early</p> <p>² 42 U.S.C § 2000d. ³ Arizona’s transportation system is partly funded by grants from the Federal Highway Administration through the Federal Aid Highway Program. ⁴ Transcript of Civil Rights Act (1964) http://www.ourdocuments.gov/doc.php?flash=true&doc=97&page=transcript (last visited July 23, 2013). ⁵ U.S. Commission on Civil Rights, Title VI and Environmental Justice http://www.usccr.gov/pubs/envjust/ch3.htm (last visited July 6, 2013). ⁶ Gila River originates in southwestern New Mexico and stretches about 600 miles across Arizona. (The Gila River Featured as Arizona’s River of the Month Aug. 29, 2012 http://www.edf.org/news/gila-river-featured-arizonas-river-month (last visited July 6, 2013)). ⁷ Gila River Alliance for a Clean Environment - Support and Network, <i>Take action for Indigenous rights and sacred land on Indigenous Peoples Day</i>, http://www.geocities.ws/contaminatedinaz/announce.html (last visited July 6, 2013).</p>
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Code	Issue	Response
4 (cont.)		conditions. The air quality analyses were updated for the Final Environmental Impact Statement, including a quantitative particulate matter (PM ₁₀) analysis, and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement. Congestion relief resulting from the proposed freeway would provide localized air quality emissions reductions on area freeways and arterial streets and at interchanges, benefiting users of area highways and those living near congested roads.
5	Environmental Justice, Public Involvement	<p>The section entitled <i>Title VI and Environmental Justice</i>, beginning on page 4-29 in the Draft Environmental Impact Statement, presents acceptable methods, data, and assumptions to assess the potential for disproportionately high and adverse effects from the proposed action on environmental justice populations and disparate impacts to populations protected under Title VI. Based upon the content of the section, no such effects would result from the action alternatives. In light of comments received on the Draft Environmental Impact Statement, the above-referenced conclusions were confirmed in the preparation of the Final Environmental Impact Statement. To provide further clarity, the discussions of environmental justice and Title VI were separated and additional text explaining the relationship of environmental justice and Title VI to various environmental elements was added throughout Chapter 4, <i>Affected Environment, Environmental Consequences, and Mitigation</i>, as exemplified by the inserted text on page 4-29 of the Final Environmental Impact Statement.</p> <p>The Arizona Department of Transportation and Federal Highway Administration provided equal access to the public participation process to the Gila River Indian Community and its members. This information has also been added to the <i>Environmental Justice and Title VI</i> Section on pages 4-38 and 4-44 of the Final Environmental Impact Statement, respectively. The Arizona Department of Transportation and Federal Highway Administration solicited input from the Gila River Indian Community and other Native American tribes and tribal members and fully considered input and comments that were received.</p> <p>Chapter 2 of the Final Environmental Impact Statement is dedicated to the explanation of the Gila River Indian Community outreach undertaken for the project. Chapter 6 of the Final Environmental Impact Statement further describes Community outreach throughout the process. The Gila River Indian Community was provided equal opportunities to participate in the project as all other populations and agencies. This outreach was undertaken, in part, to ensure all populations had equal access to the process and, in part, to ensure disparate nor disproportionate and highly adverse impacts would result from the construction and operation of the proposed action.</p>
6	Title VI	<p>The cultural and religious places of importance, like the South Mountains, are acknowledged in the Draft Environmental Impact Statement in several locations, notably pages 4-132 and 5-26. The proposed project would accommodate and preserve (to the fullest extent possible from the available alternatives) access to the South Mountains for religious practices.</p> <p>The section entitled <i>Title VI and Environmental Justice</i>, beginning on page 4-29 in the Draft Environmental Impact Statement, presents acceptable methods, data, and assumptions to assess the potential for disproportionately high and adverse effects from the proposed action on environmental justice populations and disparate impacts to populations protected under Title VI. Based upon the content of the section, no such effects would result from the action alternatives. In light of</p>

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	<p>II. TITLE VI OF THE CIVIL RIGHTS ACT OF 1964</p> <p>To succeed in this Civil Rights complaint, the complainant does not have to show that there was a deliberate, intentional discrimination by ADOT, but rather, that there is a discriminatory effect / disparate impact that gives rise to a section 601 Title VI of the Civil Rights Act of 1964 violation. Section 601 of Title VI of the Civil Rights Act of 1964 states that “No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.”² Section 602 of Title VI states: “Each Federal department and agency which is empowered to extend Federal financial assistance to any program or activity³...is authorized and directed to effectuate the provisions of section 601”⁴</p> <p>Section 602 prohibits recipients of federal funds to engage in any activities that result in discriminatory effect or disparate impact against individuals, groups of people, or whole communities of a certain race, color, or national origin.⁵ The discriminatory effect / disparate impact can occur when a seemingly neutral decision or action results in an unjustifiable adverse effect. Or in other words, an inaction or action by a recipient of federal funds that may appear neutral on its face and is not accompanied with any intent to discriminate, but nevertheless negatively affects an individual, groups of people, or a whole community of a certain race, color, or national origin, without any substantial legitimate justification, violates Title VI.</p> <p>The actions of ADOT were clearly not neutral and were made with total awareness and acknowledgement that the proposed freeway route through the sacred mountain would have serious negative cultural, spiritual and health impacts on a protected class of people.</p> <p>III. THE COMPLAINANTS</p> <p>Complainant GRACE is a grassroots organization of the Akimel O’odham, (River People) and Maricopa (Pee Posh) indigenous peoples of the GRIC. The GRIC’s reservation abuts the proposed project site, the GRIC and its people including the complainant have strong cultural and spiritual ties to South Mountain and they use the project site for cultural and spiritual purposes. Under Title VI, Native Americans are a protected class and historically have been discriminated against by the US government</p> <p>GRACE advocates for the protection of the environment and the sacred and cultural sites of the Gila River Indian Community and its people.⁶ Its mission is “to inform Indigenous peoples on environmental issues affecting their communities.”⁷ GRACE was formed in the early</p> <p>² 42 U.S.C § 2000d. ³ Arizona’s transportation system is partly funded by grants from the Federal Highway Administration through the Federal Aid Highway Program. ⁴ Transcript of Civil Rights Act (1964) http://www.ourdocuments.gov/doc.php?flash=true&doc=97&page=transcript (last visited July 23, 2013). ⁵ U.S. Commission on Civil Rights, Title VI and Environmental Justice http://www.usccr.gov/pubs/envjust/ch3.htm (last visited July 6, 2013). ⁶ Gila River originates in southwestern New Mexico and stretches about 600 miles across Arizona. (The Gila River Featured as Arizona’s River of the Month Aug. 29, 2012 http://www.edf.org/news/gila-river-featured-arizonas-river-month (last visited July 6, 2013)). ⁷ Gila River Alliance for a Clean Environment - Support and Network, <i>Take action for Indigenous rights and sacred land on Indigenous Peoples Day</i>, http://www.geocities.ws/contaminatedinaz/announce.html (last visited July 6, 2013).</p>
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6 (cont.)		comments received on the Draft Environmental Impact Statement, the above-referenced conclusions were confirmed in the preparation of the Final Environmental Impact Statement. A very small portion of the mountain would be impacted by the proposed freeway (less than 0.03 percent of the total area). Although the Draft Environmental Impact Statement describes the impact on the South Mountains as adverse, Native Americans would not be kept from practicing their beliefs, access to the mountain would be maintained, and mitigation measures would be implemented based on input from members of the Gila River Indian Community.
7	Title VI	Comment noted. Regulation cited.
8	Environmental Justice and Title VI, Air Quality	<p>The Draft Environmental Impact Statement, after consultation and coordination efforts, accommodates and preserves (to the fullest extent possible from the available alternatives) access to the South Mountains for religious practices. A very small portion of the mountain would be impacted by the proposed freeway (less than 0.03 percent of the total area). Although the Draft Environmental Impact Statement describes the impact on the South Mountains as adverse, Native Americans would not be kept from practicing their beliefs, access to the mountain would be maintained, and mitigation measures would be implemented based on input from members of the Gila River Indian Community.</p> <p>The Arizona Department of Transportation and Federal Highway Administration have been attentive to concerns expressed by the Gila River Indian Community and reiterate that position in this comment; the agencies have taken these concerns into account in describing potential impacts in the Draft Environmental Impact Statement, in ensuring that access to South Mountain would be preserved, and in developing and recommending the implementation of numerous mitigation measures.</p> <p>The proposed freeway is not located on Native American land. The South Mountain Park/Preserve is owned by the City of Phoenix. Through many years of transportation planning in the valley and as discussed in Chapter 1, <i>Purpose and Need</i>, there is a compelling government interest for the proposed freeway. Consultation has occurred and will continue to occur at all levels of government, including the Gila River Indian Community. Mitigation measures have been identified by the Tribal Historic Preservation Officer that will be implemented. The Preferred Alternative is recognized to have an adverse impact on the South Mountains. Other alternatives that would have avoided the South Mountains were rejected by the Gila River Indian Community or would have had severe social and economic impacts. These alternatives would have increased costs of extraordinary magnitude.</p> <p>The air quality assessment for the proposed freeway analyzed impacts from carbon monoxide and particulate matter (PM₁₀) and followed U.S. Environmental Protection Agency guidelines. The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones. For mobile source air toxics, the analysis showed that for the Study Area, constructing the freeway would have a marginal effect on annual emissions in 2025 and 2035 (less than a 1 percent difference in total annual emissions between the Preferred Alternative and No-Action Alternative). With the Preferred Alternative in 2035, modeled mobile</p>

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11	<p>2000s when action was needed to stop Stericycle, a medical waste incineration facility, located on the GRIC reservation from continuing to illegally burn medical and non-medical waste imported onto the reservation and emit Hazardous Air Emissions (HAPs).⁸ GRACE also led the successful campaign to prevent Romic, another private hazardous waste facility operating on the GRIC reservation without the required federal permits, from continuing to violate hazardous waste laws and pollute the area and residents.”⁹</p> <p>GRIC tribal members and the tribe hold the South Mountain sacred and see it as central to its creation story.¹⁰ GRACE opposes the proposed South Mountain Loop 202 because the project would desecrate the South Mountain by going through it, resulting in a disparate impact – culturally and spiritually on the GRIC¹¹-- and in disparate cumulative health effects¹² on the GRIC tribal members.</p> <p>Complainant GRACE brings this Civil Rights Complaint on behalf of its GRIC tribal members who have been discriminated against by ADOT’s inadequate consultation and unequal public participation process and who would be disparately affected by the implementation of the South Mountain Loop due to devastating cultural, spiritual, health and environmental impacts.</p> <p>The GRIC includes the tribes of the Akimel O’odham, (River People), and the Maricopa (Pee Posh).¹³ The Akimel O’odham, who have inhabited the Sonoran Desert long before Europeans settled the Americas, are native to central and southern Arizona and are descendants of the Hohokam, whose artifacts have been dated as far back as 10,000 years ago.¹⁴ Known as the “desert farmers” by some, the Akimel O’odham were sophisticated engineers and farmers, successfully growing a variety of crops in the Sonoran desert landscape.¹⁵ The Maricopa are a Yuman tribal people.¹⁶ As early as the mid-1700s, the Maricopa arrived from their lower Colorado River area homes.¹⁷</p> <p>⁸ Greenaction for Health & Environmental Justice, <i>Gila River Alliance for a Clean Environment</i> Nov. 26, 2002 http://greenaction.cclearn.org/ies/pr112602.shtml (last visited July 6, 2013).</p> <p>⁹ Greenaction for Health and Environmental Justice, <i>Gila River Indian Community Tribal Members & Environmental Justice Supporters to Hold Rally to Demand Closure of Romic Toxic Waste Plant</i> http://greenaction.cclearn.org/indigenouslands/gilariver/documents/PressAdvisoryGilaRiverIndianCommunityToxicWasteProtest032407.pdf (last visited July 6, 2013); Censored News, Bradley Angel, <i>Gila River: Victory to shut down hazardous waste facility</i> June 20, 2007 http://bsnorrell.blogspot.com/2007/06/gila-river-victory-to-shut-down.html (last visited July 6, 2013).</p> <p>¹⁰ Gila River Indian Community Resolution NO. GR-41-07, A Resolution Designating the South Mountain Range (Muhadag, Avikwaxos) as a Sacred Place and Traditional Cultural Property of the Gila River Indian Community.</p> <p>¹¹ Indian County Media Network, <i>Video: Footage From Sacred Sites Rally in Arizona</i> April 2, 2013 http://indiancountrytodaymedianetwork.com/2013/04/02/video-footage-sacred-sites-rally-arizona-148501http://indiancountrytodaymedianetwork.com/2013/04/02/video-footage-sacred-sites-rally-arizona-148501 (last visited July 6, 2013).</p> <p>¹² Gila River Indian Community, Roberto A. Jackson <i>202 Referendum Kicks Off in Sacaton</i> http://www.gilariver.org/index.php/january-2012-grin/2519-loop-202-forum (last visited July 6, 2013).</p> <p>¹³ The Maricopa live in district 7 of the GRIC. The Gila River Indian Community, History: the Gila River, http://www.gilariver.org/index.php/about-tribe/profile/history (last visited July 6, 2013).</p> <p>¹⁴ The Gila River Indian Community, History: the Gila River, http://www.gilariver.org/index.php/about-tribe/profile/history (last visited July 6, 2013); This is the current age and most likely will change as archeologists continue to find older and older artifacts.</p> <p>¹⁵ The Gila River Indian Community, History: the Gila River, http://www.gilariver.org/index.php/about-tribe/profile/history (last visited July 6, 2013).</p> <p>¹⁶ <i>Id.</i></p> <p>¹⁷ <i>Id.</i></p>
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Code	Issue	Response
8 (cont.)		<p>source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions. The air quality analyses were updated for the Final Environmental Impact Statement, including a quantitative particulate matter (PM₁₀) analysis, and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement.</p> <p>Congestion relief resulting from the proposed freeway would provide localized air quality emissions reductions on area freeways and arterial streets and at interchanges, benefiting users of area highways and those living near congested roads.</p>
9	Title VI	Comment noted.
10	Cultural Resources	Comment noted.
11	Cultural Resources	<p>Since the beginning of the environmental impact statement process, the Federal Highway Administration and Arizona Department of Transportation have been carrying out cultural resource studies and engaging in an ongoing, open dialogue with the Gila River Indian Community Tribal Historic Preservation Office regarding the identification and evaluation of places of religious and cultural importance to the Gila River Indian Community that may be adversely affected by the proposed freeway. Such places are referred to as traditional cultural properties. As a result of these discussions and of studies conducted by the Gila River Indian Community’s Cultural Resource Management Program, the Gila River Indian Community has identified traditional cultural properties that are eligible for listing in the National Register of Historic Places and that could be affected by construction of the proposed freeway. In certain cases, listing these properties on the National Register of Historic Places may offer them protection under Section 4(f) of the Department of Transportation Act. The traditional cultural properties identified are culturally important to other Native American tribes as well. For more discussion of traditional cultural properties, see the section, <i>Cultural Resources</i>, beginning on page 4-140 of the Final Environmental Impact Statement and pages 5-26 through 5-28.</p> <p>Section 106 of the National Historic Preservation Act requires a government-to-government relationship between the Federal Government and Indian tribes as described beginning on page 4-140 of the Final Environmental Impact Statement. Section 106 requires that federal agencies take into account the effects of their undertakings on historic properties. This process requires consultation with tribal authorities. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. The consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Register of Historic Places eligibility recommendations (including traditional cultural properties), project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.</p> <p>Public involvement with the Gila River Indian Community was conducted as requested by the tribal government. Prior to October 2005, early efforts to involve the Gila River Indian Community included attending tribal meetings and monthly</p>

(Response 11 continues on next page)

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	<p>2000s when action was needed to stop Stericycle, a medical waste incineration facility, located on the GRIC reservation from continuing to illegally burn medical and non-medical waste imported onto the reservation and emit Hazardous Air Emissions (HAPs).⁸ GRACE also led the successful campaign to prevent Romic, another private hazardous waste facility operating on the GRIC reservation without the required federal permits, from continuing to violate hazardous waste laws and pollute the area and residents.”⁹</p> <p>GRIC tribal members and the tribe hold the South Mountain sacred and see it as central to its creation story.¹⁰ GRACE opposes the proposed South Mountain Loop 202 because the project would desecrate the South Mountain by going through it, resulting in a disparate impact – culturally and spiritually on the GRIC¹¹ – and in disparate cumulative health effects¹² on the GRIC tribal members.</p> <p>Complainant GRACE brings this Civil Rights Complaint on behalf of its GRIC tribal members who have been discriminated against by ADOT’s inadequate consultation and unequal public participation process and who would be disparately affected by the implementation of the South Mountain Loop due to devastating cultural, spiritual, health and environmental impacts.</p> <p>The GRIC includes the tribes of the Akimel O’odham, (River People), and the Maricopa (Pee Posh).¹³ The Akimel O’odham, who have inhabited the Sonoran Desert long before Europeans settled the Americas, are native to central and southern Arizona and are descendants of the Hohokam, whose artifacts have been dated as far back as 10,000 years ago.¹⁴ Known as the “desert farmers” by some, the Akimel O’odham were sophisticated engineers and farmers, successfully growing a variety of crops in the Sonoran desert landscape.¹⁵ The Maricopa are a Yuman tribal people.¹⁶ As early as the mid-1700s, the Maricopa arrived from their lower Colorado River area homes.¹⁷</p> <p>⁸ Greenaction for Health & Environmental Justice, <i>Gila River Alliance for a Clean Environment</i> Nov. 26, 2002 http://greenaction.cclearn.org/fies/pr112602.shtml (last visited July 6, 2013).</p> <p>⁹ Greenaction for Health and Environmental Justice, <i>Gila River Indian Community Tribal Members & Environmental Justice Supporters to Hold Rally to Demand Closure of Romic Toxic Waste Plant</i> http://greenaction.cclearn.org/indigenoulands/gilariver/documents/PressAdvisoryGilaRiverIndianCommunityToxicWasteProtest032407.pdf (last visited July 6, 2013); Censored News, Bradley Angel, <i>Gila River: Victory to shut down hazardous waste facility</i> June 20, 2007 http://bsnorrell.blogspot.com/2007/06/gila-river-victory-to-shut-down.html (last visited July 6, 2013).</p> <p>¹⁰ Gila River Indian Community Resolution NO. GR-41-07, A Resolution Designating the South Mountain Range (Muhadag, Avikwaxos) as a Sacred Place and Traditional Cultural Property of the Gila River Indian Community.</p> <p>¹¹ Indian County Media Network, <i>Video: Footage From Sacred Sites Rally in Arizona</i> April 2, 2013 http://indiancountrytodaymedianetwork.com/2013/04/02/video-footage-sacred-sites-rally-arizona-148501http://indiancountrytodaymedianetwork.com/2013/04/02/video-footage-sacred-sites-rally-arizona-148501 (last visited July 6, 2013).</p> <p>¹² Gila River Indian Community, Roberto A. Jackson <i>202 Referendum Kicks Off in Sacaton</i> http://www.gilariver.org/index.php/january-2012-grin/2519-loop-202-forum (last visited July 6, 2013).</p> <p>¹³ The Maricopa live in district 7 of the GRIC. The Gila River Indian Community, History: the Gila River, http://www.gilariver.org/index.php/about-tribe/profile/history (last visited July 6, 2013).</p> <p>¹⁴ The Gila River Indian Community, History: the Gila River, http://www.gilariver.org/index.php/about-tribe/profile/history (last visited July 6, 2013); This is the current age and most likely will change as archeologists continue to find older and older artifacts.</p> <p>¹⁵ The Gila River Indian Community, History: the Gila River, http://www.gilariver.org/index.php/about-tribe/profile/history (last visited July 6, 2013).</p> <p>¹⁶ <i>Id.</i></p> <p>¹⁷ <i>Id.</i></p>

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11 (cont.)		<p>meetings with Gila River Indian Community Departments (see discussion beginning on page 2-8 of the Final Environmental Impact Statement). On October 14, 2005, the Gila River Indian Community requested that all project-related communications take place at a government-to-government level (see letter on page A152 of Appendix 1-1). This request was honored by the Arizona Department of Transportation and the Federal Highway Administration. All public involvement efforts were implemented by the Gila River Indian Community’s public involvement officer.</p> <p>No disparate health effects, either direct or cumulative, would result from the implementation of the Preferred Alternative. The air quality assessment for the proposed freeway analyzed impacts from carbon monoxide and particulate matter (PM₁₀) and followed U.S. Environmental Protection Agency guidelines. The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones. For mobile source air toxics, the analysis showed that for the Study Area, constructing the freeway would have a marginal effect on annual emissions in 2025 and 2035 (less than a 1 percent difference in total annual emissions between the Preferred Alternative and No-Action Alternative). With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions. The air quality analyses were updated for the Final Environmental Impact Statement, including a quantitative particulate matter (PM₁₀) analysis, and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement.</p>
12	Title VI	<p>The Arizona Department of Transportation and Federal Highway Administration provided equal access to the public participation process to the Gila River Indian Community and its members. The Arizona Department of Transportation and Federal Highway Administration solicited input from the Gila River Indian Community and other Native American tribes and tribal members and considered fully the substantive input and comments that were received.</p> <p>Chapter 2 of the Final Environmental Impact Statement is dedicated to explaining the Gila River Indian Community outreach undertaken for the project. The Gila River Indian Community was provided the same opportunities to participate in the project as all other populations and agencies. Public involvement with the Gila River Indian Community was conducted as requested by the tribal government. Prior to October 2005, early efforts to involve the Gila River Indian Community included attending tribal meetings and monthly meetings with Gila River Indian Community Departments (see discussion beginning on page 2-8 of the Final Environmental Impact Statement). In addition, representatives from the Gila River Indian Community participated for years in the South Mountain Citizens Advisory Team. On October 14, 2005, the Gila River Indian Community requested that all project-related communications take place at a government-to-government level (see letter on page A152 of Appendix 1-1). This request was honored by the Arizona Department of Transportation and Federal Highway Administration. All public involvement efforts were implemented by the Gila River Indian Community’s public involvement officer. It is also important to note, that the Gila River Indian Community’s Lieutenant Governor is a member of the Transportation Policy</p>

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13	<p>In 1859, GRIC was established as the first reservation in part of what later became Arizona in 1912.¹⁸ In 1862, when water flowed freely, GRIC was growing more than one million pounds of wheat a year; however, between the 1870s and 1880s, water supplies drastically diminished due to upstream diversions by non-Native farmers. These diversions rendered farming almost nonexistent.¹⁹ Between approximately 1880 and 1920, GRIC faced mass famine and starvation.²⁰ Due to the need for outside assistance, diet and way of life completely changed.²¹ Alcoholism became a major problem and the GRIC “experienced the loss of certain cultural and artistic traditions and rituals.”²² “This time became one of...the darkest moment(s) in ...their... long history.”²³ In the 1930s, circumstances began to improve when the U.S. government completed Coolidge Dam on the upper Gila River, which created the San Carlos Reservoir: this restored some farming practices.²⁴ Eventually, small businesses, schools, health centers, and new housing began to appear on the reservation.²⁵ However, GRIC faces one of the highest levels of diabetes in the United States, thought to be directly a result of the disappearance of the traditional lifestyle and diet.²⁶</p> <p>The GRIC history also includes forced boarding school for children, which not only was psychologically and physically oppressive but was culturally and socially oppressive, as it was instituted to acculturate Native American children into non-native American Indian speaking and practicing children.</p> <p>Today, encompassing 372,000 acres along the Gila River, GRIC is the seventh largest federally recognized reservation in Arizona.²⁷ It is in both Pinal and Maricopa counties and is 17 miles south of downtown Phoenix.²⁸ Approximately 14,000 of the 21,000 enrolled GRIC members live on the reservation.²⁹ 4,274 or 36% of GRIC tribal members on the reservation are under 18 and 7,438 or 64% are over 18; 675 or 6% of GRIC tribal members are 65 and older.³⁰ The Akimel O’odham (River People) comprise 90% of the GRIC reservation and the Pee Posh (Maricopa), who live at the west end of the South Mountain, comprise about 10% of the GRIC</p>
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<p>¹⁸ In 1846, the territory now known as southern Arizona, came under the control of the US, and in 1854, the entire present day Arizona territory was officially made part of the United States territory. Arizona became a US state in 1912. <i>Id.</i></p> <p>¹⁹ <i>Id.</i></p> <p>²⁰ <i>Id.</i></p> <p>²¹ <i>Id.</i></p> <p>²² <i>Id.</i></p> <p>²³ <i>Id.</i></p> <p>²⁴ <i>Id.</i></p> <p>²⁵ <i>Id.</i></p> <p>²⁶ Jovana J. Brown, <i>When Our Water Returns: Gila River Indian Community and Diabetes I</i> http://www.evergreen.edu/tribal/docs/WhenOurWaterReturns%2009-25-09.pdf (last visited July 6, 2013).</p> <p>²⁷ ADOT, South Mountain Study Team, <i>Chapter 2 Gila River Indian Community Coordination</i> http://www.azdot.gov/south-mountain-loop-202-docs/eis/chapter2/chapter2.pdf (last visited July 6, 2013).</p> <p>²⁸ Gila River, Tourist Attractions, http://www.gilariver.org/index.php/about-tribe/profile/tourism/18-tourist-attractions/159-tourist-attractions (last visited July 6, 2013).</p> <p>²⁹ ADOT, South Mountain Study Team, <i>Chapter 2 Gila River Indian Community Coordination</i> http://www.azdot.gov/south-mountain-loop-202-docs/eis/chapter2/chapter2.pdf (last visited July 6, 2013).</p> <p>³⁰ United States Census Bureau, <i>2010 Demographic Profile</i> http://www.census.gov/popfinder/ (last visited June 17, 2013).</p>	
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12 (cont.)		<p>Committee of the Maricopa Association of Governments, which oversees the development of the 20-year <i>Regional Transportation Plan</i> and guides transportation planning in the region.</p> <p>The Arizona Department of Transportation advertisement efforts of the public hearing and public forums are documented in Chapter 6 of the Final Environmental Impact Statement beginning on page 6-23. The Gila River Indian Community Communication and Public Affairs Office informed the Arizona Department of Transportation that all communication and distribution of informational materials on Gila River Indian Community land would be handled by the Communication and Public Affairs Office. Advertisement text regarding the project, the public comment period, the public hearing, and the various ways for the public to submit comments regarding the South Mountain Freeway Draft Environmental Impact Statement was given to the Gila River Indian Community’s Public Information Officer at the Transportation Technical Team meeting on April 30, 2013. Two advertisements regarding the public hearing, information regarding the location and availability of the Draft Environmental Impact Statement, and a map of the alternatives was placed in the May 2013 monthly issue of the <i>Gila River Indian News</i>.</p> <p>The Arizona Department of Transportation Community Relations distributed electronic notices (e-newsletters) through the Government Delivery system to over 12,000 constituents who voluntarily signed up for project alerts along Interstate 10 (Papago, Maricopa, and Santan Freeways). These electronic notices included notice of availability of the Draft Environmental Impact Statement (distributed on April 26, 2013); date of the public hearing (distributed on May 10, 2013); dates of the community forums (distributed on May 29, 2013); and notification in June regarding the close of the Draft Environmental Impact Statement public comment period. In addition, anyone who had attended a previous meeting regarding the proposed action and signed in received all of this information mailed individually. On May 6, 2013, 73,564 mailers were distributed to addresses within the Study Area.</p> <p>The Arizona Department of Transportation provided vouchers for public hearing parking and for public transit to the hearing. For the first time in the State’s history, a shuttle bus to the hearing was provided from six locations in the Phoenix area, including two on the Gila River Indian Community (Komatke Boys & Girls Club and the Governance Center in Sacaton). All ads provided telephone numbers and electronic contact information regarding information on the shuttle schedules and pick-up locations. Response to Comment 11 immediately preceding this response addresses cultural, spiritual, health and environmental impacts referenced in the comment.</p>
13	Cultural Resources	Comment noted.
14		Comment noted.
15	Tribal Involvement	Comment noted.

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15	<p>reservation. GRIC is organized into seven territorial districts.³¹ GRIC has an executive branch, comprised of a governor and lieutenant governor; a legislative, made up of a Community Council³² consisting of members from the seven territorial districts of the reservation; and a judicial branch, with a Community Court of seven judges that provides services to approximately 20,000 members of GRIC.³³</p> <p>GRIC's economy has been growing via agricultural, gaming, and the development of industrial parks.³⁴ GRIC is currently one of the largest agricultural producers in the state of Arizona, farming cotton, wheat, millet, alfalfa, barley, melons, pistachios, olives, citrus, and vegetables.³⁵ Now that it has finally settled an ongoing water dispute and will be receiving enough water to sustain itself, it plans to put in approximately 140,000 more acres of agriculture in the next 20 years.³⁶ GRIC has three casinos, Wild Horse Pass, Lone Butte, and Vee Quiva.³⁷ GRIC operates three industrial parks.³⁸ Like the US states, GRIC has its own transportation and environmental departments.</p> <p>As a Native Nation, the federal government has a direct trust relationship with the GRIC and its people. The basis for this special legal relationship is found directly in the Constitution and memorialized in treaties.³⁹ This trust relationship applies to all Federal agencies and to Federal action outside Indian reservations.⁴⁰ Due to this trust relationship, the government has a special legal responsibility to review this complaint according to the unique requirements owed to the GRIC by the government.</p> <p>Because of the 1992 National Historic Preservation Act (NHPA) Amendments, the GRIC has a Tribal Historic Preservation Officer (THPO) to assist in identifying and nominating historic properties / historic resources on their tribal lands⁴¹ for the National Park Service (NPS) to place</p>
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17	<p>³¹ The districts are: Blackwater, Hashen, Kehk, Sacaton, Santan, Casa Blanca, Kumatke, Maricopa Colony. (The Gila River Indian Community, Government, http://www.gilariver.org/index.php/about-tribe/districts (last visited June 9, 2013)).</p> <p>³² According to Article III Sect. 6 of the Gila River Indian Community Constitution, "the Council shall have the power to enact ordinances, subject to review of the Secretary of the Interior." http://thorpe.ou.edu/IRA/gilacons.html (last visited July 8, 2013).</p> <p>³³ The Gila River Indian Community, Government, http://www.gilariver.org/ (last visited July 8, 2013).</p> <p>³⁴ Inter Tribal Council of Arizona, Inc., Gila River Indian Community http://itcaonline.com/?page_id=1158 (last visited July 8, 2013).</p> <p>³⁵ <i>Id.</i></p> <p>³⁶ GRIC Response to EPA, Gila River Indian Community Response to EPA's Nine Factors Requirement for Designation of PM-2.5 Under the National Ambient Air Quality Standards, p. 2 Jan. 4, 2011, http://www.regulations.gov/#?documentDetail;D=EPA-HQ-OAR-2010-0163-0016 (last visited July 6, 2013); Arizona Department of Water Resources, Gila River Indian Community Water Rights Settlement – 2006, http://www.azwater.gov/AzDWR/SurfaceWater/Adjudications/New_Gila_River_Indian_Community_Settlement.htm (last visited July 11, 2013).</p> <p>³⁷ Gila River Gaming Enterprises, http://www.wingilariver.com/ (last visited July 22, 2013).</p> <p>³⁸ Inter Tribal Council of Arizona, Inc., Gila River Indian Community http://itcaonline.com/?page_id=1158 (last visited July 8, 2013).</p> <p>³⁹ See Art. I, § 8, par. 3 of the U.S. Constitution.</p> <p>⁴⁰ See, e.g., <i>Nance v. Environmental Protection Agency</i>, 645 F.2d 701, 711 (9th Cir. 1981), cert. den. 454 U.S. 1081 (1981); <i>Pyramid Lake Paiute Tribe v. U.S. Dept. of Navy</i>, 898 F.2d 1410, 1420 (9th Cir. 1990). See, e.g., internal guidance documents issued by the Department of the Interior in its Departmental Manual (DM), at 303 DM chapter 2, 512 DM chapter 2 (acknowledging that all bureaus and offices within DOI are subject to the federal trust responsibility when their actions affect "tribal trust resources, trust assets, or tribal health and safety." 512 DM §2.2. The DOI Departmental Manual is available in the Electronic Library of Interior Policies at: elips.doi.gov.</p> <p>⁴¹ Tribal lands means "all lands within the exterior boundaries of any Indian reservation; and ...all dependent Indian communities" (16 U.S.C. § 470w(14)).</p>

Code	Issue	Response
16	Title VI	Since Gila River Alliance for a Clean Environment's Title VI complaint was received during the public comment period for the Draft Environmental Impact Statement, it has been included as a part of the Comment and Response appendix. However, it should be noted that the National Environmental Policy Act process is separate from the U.S. Department of Transportation Title VI complaint process.
17	Cultural Resources	<p>Since the beginning of the environmental impact statement process, the Federal Highway Administration and Arizona Department of Transportation have been carrying out cultural resource studies and engaging in an ongoing, open dialogue with the Gila River Indian Community Tribal Historic Preservation Office regarding the identification and evaluation of places of religious and cultural importance to the Gila River Indian Community that may be adversely affected by the proposed freeway. Such places are referred to as traditional cultural properties. As a result of these discussions and of studies conducted by the Gila River Indian Community's Cultural Resource Management Program, the Gila River Indian Community has identified traditional cultural properties that are eligible for listing in the National Register of Historic Places and that could be affected by construction of the proposed freeway. In certain cases, listing these properties on the National Register of Historic Places may offer them protection under Section 4(f) of the Department of Transportation Act. The traditional cultural properties identified are culturally important to other Native American tribes as well. For more discussion of traditional cultural properties, see the section, <i>Cultural Resources</i>, beginning on page 4-140 of the Final Environmental Impact Statement and pages 5-26 through 5-28.</p> <p>Section 106 of the National Historic Preservation Act requires a government-to-government relationship between the Federal Government and Indian tribes as described beginning on page 4-140 of the Final Environmental Impact Statement. Section 106 requires that federal agencies take into account the effects of their undertakings on historic properties. This process requires consultation with tribal authorities. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. The consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Register of Historic Places eligibility recommendations (including traditional cultural properties), project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.</p>

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	<p>on the National Register of Historic Places (NRHP) of 1966. The purpose of the NHPA is to “preserve the historical and cultural foundations of the Nation as living parts of community life.”⁴² The NHPA “established the National Register of Historic Places and the requirements under Section 106 of that Act that require federal agencies to take into account the effects of their actions on historic properties listed on or eligible for inclusion on the National Register.”⁴³ The South Mountain has been approved as a traditional cultural property “eligible for inclusion in the National Register because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community’s history, and (b) are important in maintaining the continuing cultural identity of the community.”⁴⁴</p> <p>IV. THE ARIZONA DEPARTMENT OF TRANSPORTATION</p> <p>ADOT, a state government agency created in 1974, is the sponsor of the proposed construction and operation of the South Mountain Loop 202.⁴⁵ It is “responsible for collecting transportation revenues and for planning, constructing and maintaining Arizona’s highway infrastructure,”⁴⁶ as well as, the state’s public transportation and municipal airports.⁴⁷ Its mission is “to provide a safe, efficient, cost-effective transportation system.”⁴⁸ On April 26, 2013, ADOT released a DEIS for the Loop 202 South Mountain Freeway Study.⁴⁹</p> <p>ADOT is a recipient of federal highway funds and is thus subject to and required to comply with the non-discriminatory requirements of Title VI of the U.S. Civil Rights Act.</p> <p>V. RIPENESS</p> <p>This complaint is timely filed because it is in response to the improper and discriminatory action taken by ADOT’s April 26, 2013 sponsorship and release of the DEIS for the Loop 202 South Mountain Freeway Study that was prepared by the Federal Highway Administration (FHWA), the federal lead agency for the proposed action, in cooperation with the U.S. Army Corps of Engineers (USACE), the U.S. Bureau of Indian Affairs (BIA), and the Western Area</p> <p>⁴² Patricia Parker, <i>Traditional Cultural Properties: What You Do and How We Think</i>, Volume 16 CRM 1993 http://www8.nau.edu/hepo-p/Parker.pdf.</p> <p>⁴³ <i>Id.</i></p> <p>⁴⁴ National Park Service, National Register Bulletin 38, Guidelines for Evaluating and Documenting Traditional Cultural Properties 1990, available at www.nps.gov/nr/publications/bulletins/nrb38/htm; Criteria for eligibility for being on the National Register are: “associated with events that have made a significant contribution to the broad patterns of our history; are associated with the lives of persons significant in our past; embody the distinctiveness of a type, period, or method of construction, or...represent the work of a master, or...possess high artistic values, or...represent a significant and distinguishable entity whose components may lack individual distinction; or have yielded, or may be likely to yield, information important in prehistory or history.” 36 C.F.R. § 60.4.</p> <p>⁴⁵ ADOT, South Mountain Study Team, <i>South Mountain Freeway Draft EIS Summary</i>, 1 available at http://www.azdot.gov/Highways/Valley_Freeways/Loop_202/South_Mountain/PDF/FHWA-AZ-EIS/00-SMDEIS-Summary-Chapter.pdf</p> <p>⁴⁶ ADOT, <i>Strategic Plan fiscal years 2013-2017</i>, 2011 available at http://www.azdot.gov/Inside_adopt/PDF/StrategicPlan.pdf.</p> <p>⁴⁷ About ADOT, http://www.azdot.gov/Index_docs/About_ADOT.asp (last visited July 8, 2013).</p> <p>⁴⁸ <i>Id.</i></p> <p>⁴⁹ Loop 202 (South Mountain Freeway), http://www.azdot.gov/Highways/Valley_Freeways/Loop_202/South_Mountain/index.asp (last visited July 8, 2013).</p>

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Code	Issue	Response
18	Title VI	Since Gila River Alliance for a Clean Environment’s Title VI complaint was received during the public comment period for the Draft Environmental Impact Statement, it has been included as a part of the Comment and Response appendix. However, it should be noted that the National Environmental Policy Act process is separate from the U.S. Department of Transportation Title VI complaint process.

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19	<p>Power Administration.⁵⁰ The release of the DEIS began a 90-day public review and comment period that will conclude on July 24, 2013.⁵¹</p> <p>This complaint is also timely filed because ADOT conducted a public participation process to receive public input on the proposed project, but conducted it in a way that provided GRIC tribal members, including members of GRACE, less of an opportunity to meaningfully participate in the process than non-Native people.</p> <p>VI. STATEMENT OF FACTS</p> <p>A. SOUTH MOUNTAIN (Muhadag, Avikwaxos)</p> <p>The South Mountain, known in the Pima language as the Muhadag and in the Maricopa language, Avikwaxos,⁵² consists of the Ma Ha Tauk, Gila, and Guadalupe Mountain Ranges.⁵³ It abuts the northern territory of the GRIC and consequently, is the immediate landscape of the northern boundary of the GRIC reservation. A portion of Main Ridge North and Main Ridge South of the South Mountain is on the GRIC, and serve as the “Community’s main, direct physical link to the South Mountains”.⁵⁴ The South Mountain “figures prominently in oral traditions of both the Akimel O’Odham (River People) and the Pee Posh (Maricopa).”⁵⁵ The Akimel O’odham believe that South Mountain is where their creator immersed.</p> <p>On January 6, 1982, the Gila River Indian Community Tribal Council adopted an ordinance declaring “as a matter of Community policy and legislative determination, that the public interests of the Pima-Maricopa people and the interests of all other persons living within the jurisdiction of the Gila River Indian Community require that the Community adopt a means whereby all sites, location, structures, and objects of sacred, historical or scientific interest or nature will be protected from desecration, destruction, theft, or other interference.”⁵⁶</p> <p>Then in 1989, the Gila River Indian Community Tribal Council adopted a resolution to preserve the lands of their Hohokam ancestors, by approving the “Policy Statement of the Four Southern Tribes (Salt River Pima-Maricopa Indian Community, Ak Chin Indian Community, Tohono O’odham Nation, and the Gila River Indian Community) which outlines the Four Tribes intent to protect, promote, and preserve cultural affinity to the HuHuKam.”⁵⁷</p> <p>On April 4, 2007, the Gila River Indian Community Tribal Council adopted a tribal resolution affirming that the South Mountain is “a sacred place / traditional cultural property ..that...must be kept inviolate”⁵⁸ thereby recording the sacredness and significance of South</p> <p>⁵⁰ ADOT, South Mountain Study Team, <i>South Mountain Freeway Draft EIS Summary</i>, at 1. ⁵¹ ADOT, Loop 202 (South Mountain Freeway), http://www.azdot.gov/Highways/Valley_Freeways/Loop_202/South_Mountain/index.asp (last visited July 8, 2013). ⁵² Gila River Indian Community Resolution NO. GR-41-07, A Resolution Designating the South Mountain Range (Muhadag, Avikwaxos) as a Sacred Place and Traditional Cultural Property of the Gila River Indian Community. ⁵³ City of Phoenix, South Mountain Park Preserve Map, available at http://phoenix.gov/webcms/groups/internet/@inter/@recl/@parks/@parks/@nrd/documents/web_content/062880.pdf. ⁵⁴ ADOT, South Mountain Study Team, chapter 5 <i>Section 4(f) Evaluation</i> p. 26 available at http://www.azdot.gov/Highways/Valley_Freeways/Loop_202/South_Mountain/PDF/south-mountain-loop-202-docs/EIS/chapter5/chapter5.pdf. ⁵⁵ Gila River Indian Community Resolution NO. GR-41-07, A Resolution Designating the South Mountain Range (Muhadag, Avikwaxos) as a Sacred Place and Traditional Cultural Property of the Gila River Indian Community. ⁵⁶ <i>Id.</i> ⁵⁷ <i>Id.</i> ⁵⁸ <i>Id.</i></p>

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19	Title VI	<p>The Arizona Department of Transportation and Federal Highway Administration provided equal access to the public participation process to the Gila River Indian Community and its members. The Arizona Department of Transportation and Federal Highway Administration solicited input from the Gila River Indian Community and other Native American tribes and tribal members and considered fully the substantive input and comments that were received.</p> <p>Public involvement with the Gila River Indian Community was conducted as requested by the tribal government. Prior to October 2005, early efforts to involve the Gila River Indian Community included attending tribal meetings and monthly meetings with Gila River Indian Community Departments (see discussion beginning on page 2-8 of the Final Environmental Impact Statement). On October 14, 2005, the Gila River Indian Community requested that all project-related communications take place at a government-to-government level (see letter on page A152 of Appendix 1-1). This request was honored by the Arizona Department of Transportation and Federal Highway Administration. All public involvement efforts were implemented by the Gila River Indian Community’s public involvement officer.</p> <p>Chapter 2 of the Final Environmental Impact Statement is dedicated to the explanation of the Gila River Indian Community outreach undertaken for the project. The Gila River Indian Community was provided the same opportunities to participate in the project as all other populations and agencies.</p> <p>The Arizona Department of Transportation advertisement efforts of the public hearing and public forums are documented in Chapter 6 of the Final Environmental Impact Statement beginning on page 6-23. The Gila River Indian Community Communication and Public Affairs Office informed the Arizona Department of Transportation that all communication and distribution of informational materials on Gila River Indian Community land would be handled by the Communication and Public Affairs Office. Advertisement text regarding the project, the public comment period, the public hearing, and the various ways for the public to submit comments regarding the South Mountain Freeway Draft Environmental Impact Statement was given to the Gila River Indian Community’s Public Information Officer at the Transportation Technical Team meeting on April 30, 2013. Two advertisements regarding the public hearing, information regarding the location and availability of the Draft Environmental Impact Statement, and a map of the alternatives was placed in the May 2013 monthly issue of the <i>Gila River Indian News</i>.</p> <p>The Arizona Department of Transportation Community Relations distributed electronic notices (e-newsletters) through the Government Delivery system to over 12,000 constituents who voluntarily signed up for project alerts along Interstate 10 (Papago, Maricopa, and Santan Freeways). These electronic notices included notice of availability of Draft Environmental Impact Statement (distributed on April 26, 2013); date of the public hearing (distributed on May 10, 2013); dates of the community forums (distributed on May 29, 2013); and notification in June regarding the close of the Draft Environmental Impact Statement public comment period. In addition, anyone who had attended a previous meeting on the proposed action and signed in received all of this information mailed individually. On May 6, 2013, 73,564 mailers were distributed to addresses within the Study Area.</p>

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	<p>Power Administration.⁵⁰ The release of the DEIS began a 90-day public review and comment period that will conclude on July 24, 2013.⁵¹</p> <p>This complaint is also timely filed because ADOT conducted a public participation process to receive public input on the proposed project, but conducted it in a way that provided GRIC tribal members, including members of GRACE, less of an opportunity to meaningfully participate in the process than non-Native people.</p> <p>VI. STATEMENT OF FACTS</p> <p>A. SOUTH MOUNTAIN (Muhadag, Avikwaxos)</p> <p>The South Mountain, known in the Pima language as the Muhadag and in the Maricopa language, Avikwaxos,⁵² consists of the Ma Ha Tauk, Gila, and Guadalupe Mountain Ranges.⁵³ It abuts the northern territory of the GRIC and consequently, is the immediate landscape of the northern boundary of the GRIC reservation. A portion of Main Ridge North and Main Ridge South of the South Mountain is on the GRIC, and serve as the “Community’s main, direct physical link to the South Mountains”.⁵⁴ The South Mountain “figures prominently in oral traditions of both the Akimel O’Odham (River People) and the Pee Posh (Maricopa).”⁵⁵ The Akimel O’odham believe that South Mountain is where their creator immersed.</p> <p>On January 6, 1982, the Gila River Indian Community Tribal Council adopted an ordinance declaring “as a matter of Community policy and legislative determination, that the public interests of the Pima-Maricopa people and the interests of all other persons living within the jurisdiction of the Gila River Indian Community require that the Community adopt a means whereby all sites, location, structures, and objects of sacred, historical or scientific interest or nature will be protected from desecration, destruction, theft, or other interference.”⁵⁶</p> <p>Then in 1989, the Gila River Indian Community Tribal Council adopted a resolution to preserve the lands of their Hohokam ancestors, by approving the “Policy Statement of the Four Southern Tribes (Salt River Pima-Maricopa Indian Community, Ak Chin Indian Community, Tohono O’odham Nation, and the Gila River Indian Community) which outlines the Four Tribes intent to protect, promote, and preserve cultural affinity to the HuHuKam.”⁵⁷</p> <p>On April 4, 2007, the Gila River Indian Community Tribal Council adopted a tribal resolution affirming that the South Mountain is “a sacred place / traditional cultural property ...that...must be kept inviolate”⁵⁸ thereby recording the sacredness and significance of South</p> <p>⁵⁰ ADOT, South Mountain Study Team, <i>South Mountain Freeway Draft EIS Summary</i>, at 1.</p> <p>⁵¹ ADOT, Loop 202 (South Mountain Freeway), http://www.azdot.gov/Highways/Valley_Freeways/Loop_202/South_Mountain/index.asp (last visited July 8, 2013).</p> <p>⁵² Gila River Indian Community Resolution NO. GR-41-07, A Resolution Designating the South Mountain Range (Muhadag, Avikwaxos) as a Sacred Place and Traditional Cultural Property of the Gila River Indian Community.</p> <p>⁵³ City of Phoenix, South Mountain Park Preserve Map, available at http://phoenix.gov/webcms/groups/internet/@inter/@recl/@parks/@parks/@nrd/documents/web_content/062880.pdf.</p> <p>⁵⁴ ADOT, South Mountain Study Team, chapter 5 <i>Section 4(f) Evaluation</i> p. 26 available at http://www.azdot.gov/Highways/Valley_Freeways/Loop_202/South_Mountain/PDF/south-mountain-loop-202-docs/EIS/chapter5/chapter5.pdf.</p> <p>⁵⁵ Gila River Indian Community Resolution NO. GR-41-07, A Resolution Designating the South Mountain Range (Muhadag, Avikwaxos) as a Sacred Place and Traditional Cultural Property of the Gila River Indian Community.</p> <p>⁵⁶ <i>Id.</i></p> <p>⁵⁷ <i>Id.</i></p> <p>⁵⁸ <i>Id.</i></p>
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19 (cont.)		On May 6, 2013, 73,564 mailers were distributed to addresses within the Study Area. The Arizona Department of Transportation provided vouchers for public hearing parking and for public transit to the hearing. For the first time in the State’s history, a shuttle bus to the hearing was provided from six locations in the Phoenix area, including two on the Gila River Indian Community (Komatke Boys & Girls Club and the Governance Center in Sacaton). All ads provided telephone numbers and electronic contact information regarding information on the shuttle schedules and pick-up locations.
20	Cultural Resources	Comment noted.
21	Cultural Resources, Native Americans	Comment noted.

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	<p>Mountain to the people of the GRIC and its tribal government. This important tribal resolution is attached as Exhibit A and incorporated into this complaint. The resolution states the GRIC Community Council “strongly opposes any alteration of the South Mountain Range for any purpose”...and any alteration...“would be a violation of the cultural and religious beliefs of the Gila River Indian Community and would have a negative cumulative effect on the continuing lifeways of the people of the Gila River Indian Community.”⁵⁹</p> <p>Not only is South Mountain itself sacred, but there are also numerous sites with highly significant meaning and purpose to GRIC.⁶⁰ There are many ancestral burial and archeological sites, and ancient shrines.⁶¹ Further, the Colorado River Indian Tribes⁶², Salt River Pima-Maricopa Indian Community⁶³, the Ak-Chin Indian Community⁶⁴, the Tohono O’odham Nation⁶⁵, and the Pascua Yaqui Tribe⁶⁶ also hold the South Mountain sacred.⁶⁷</p> <p>Much of the South Mountain is within the South Mountain Park Preserve (SMPP),⁶⁸ which is a 16,600 mile park preserve in the Sonoran desert⁶⁹ in Phoenix, Arizona. First created in 1924 during the New Deal era, 13,000 acres of the land were bought from the federal government by the city of Phoenix for a “scenic/pleasure park.”⁷⁰ Then, in 1927, the Bureau of Land Management (“BLM”) conveyed 9,200 acres of land to the City of Phoenix where some of that land was converted into the SMPP.⁷¹ Then, in April 2009, 247 acres of State Trust Land, were purchased from the Arizona Land Department.⁷² SMPP is a historic property and is eligible</p> <p>⁵⁹ <i>Id.</i></p> <p>⁶⁰ For example, Red Mountain, South Back Mountain, and Sandi Muck Mountain.</p> <p>⁶¹ YouTube, <i>South Mountain Freeway Protest</i>, https://www.youtube.com/watch?v=IMws03pJ0iE (last visited July 8, 2013).</p> <p>⁶² Colorado River Indian Tribes, http://www.crit-nsn.gov/ (last visited July 8, 2013).</p> <p>⁶³ The Salt River Pima-Maricopa Indian Community, http://www.srpmic-nsn.gov/ (last visited July 8, 2013).</p> <p>⁶⁴ Ak-Chin Indian Community, http://www.ak-chin.nsn.us/ (last visited July 8, 2013).</p> <p>⁶⁵ Tohono O’odham Nation, http://www.tonation-nsn.gov/default.aspx (last visited July 8, 2013).</p> <p>⁶⁶ Pascua Yaqui Tribe, http://www.pascuayaqui-nsn.gov/ (last visited July 8, 2013).</p> <p>⁶⁷ The DEIS states “archaeological sites and places considered culturally important by Native American groups would be affected by any of the build alternatives. The Gila River Indian Community (GRIC) and the Salt River Pima-Maricopa Indian Community have both passed Tribal Resolutions designating the South Mountains as a TCP and the Colorado River Indian tribes have said that they also consider the South Mountains a TCP.” (South Mountain Transportation Corridor August 28, 2008 Draft Technical Report Summary Cultural Resources p. 4 available at http://www.azdot.gov/southmountainfreeway/PDF/082808_SMCAT_CulturalResources_Summary_Final.pdf).</p> <p>⁶⁸ The Trust for Public Land: Conserving Land for People, <i>The 150 Largest City Parks</i> available at http://cloud.tpl.org/pubs/cope-largest-oldest-most-visited-parks-4-2011-update.pdf.</p> <p>⁶⁹ This desert is approximately 100,000 square miles spanning from New Mexico, California, and into Southern Arizona. The Sonoran desert is one of the most diverse deserts in the world. http://sciencefriday.com/segment/03/29/2013/the-secret-life-of-the-sonoran-desert.html (last visited July 8, 2013); Further, the Sonoran desert is providing extensive ecosystem services to humans, some already identified, like climate regulation. http://www.sonorandesert.org/ (last visited July 8, 2013).</p> <p>⁷⁰ AZR, <i>City Commission Approves Plan For Municipal Park In Salt River Mountains</i>, April 6, 1924, South Mountain History, found at http://southmountainhistory.blogspot.com/2009/05/city-commission-approves-plan-for.html.</p> <p>⁷¹ ADOT, South Mountain Study Team, chapter 5 <i>Section 4(f) Evaluation</i> at 25.</p> <p>⁷² “In 1988, the planning of what became known as South Mountain 620 began. Through years of negotiating with the City of Phoenix, and after many unsuccessful auctions, the 247 acre parcel north of Chandler Boulevard was auctioned successfully on April 2, 2009 for \$18 million. The Development Agreement for the parcel provides for a preserve, fire station and park, and also paves the way for sale and development of approximately 350 acres south of Chandler Boulevard when the market recovers.” This sale was under the name of Arizona Open Space Sales. (Arizona State Agency Publications, Arizona State Land Department Annual Report 2008-2009 p. 11 available at</p>

Code	Issue	Response
22	Cultural Resources	Comment noted.
23	Cultural Resources, South Mountain Park/ Preserve	Comment noted.

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23	<p>for listing in the National Register of Historic Places.⁷³ As stated previously, some of the South Mountain is within the GRIC’s northern territorial edge, giving the GRIC a corridor to get to other areas of the South Mountain from the reservation. As the DEIS states, the portions of the South Mountain on Community land are at the western end: the Main Ridge North and Main Ridge South. These ridges “serve as the Community’s main, direct physical link to the mountains.”⁷⁴ The SMPP, which includes the South Mountain, one of their TCPs, preserves cultural, historical, geological, and ecological resources relevant to the GILA tribal members.⁷⁵</p> <p>For the GRIC, the concept of creation is not something in the past but is an ongoing process, one that they are intrinsically a part of and are obligated to participate in. The GRIC fulfill this duty through ceremonies and rituals designed to preserve and stabilize the earth. Failure to fulfill those obligations is thought to result in great harm to the earth and the people who depend on it. Ceremonies are efforts undertaken for specific purposes in accordance with instructions handed down from generation to generation. Rituals are performed in prescribed locations that are unique and specific sites possess different spiritual properties and significance.</p> <p>Some traditionalists and Elders of the GRIC use portions of the South Mountain for periodic ceremonies and rituals. These are special people who are keepers of the tribal peoples’ heritage and culture who possess an essential role believed to sustain the tribal people as a whole. These ceremonies and rituals have been passed on through the ages and have been performed for ages.</p> <p>Traditionalists also are people who follow the natural Native American way of living from the earth: picking and harvesting traditional cultural foods like the fruit of the saguaro⁷⁶ and medicines, and teaching and guiding the young in the cultural and spiritual ways.</p> <p>B. SOUTH MOUNTAIN LOOP 202 PROPOSAL</p> <p>The South Mountain Loop 202 is a proposed eight-lane, 22-mile long highway in southwestern Maricopa County, Arizona.⁷⁷ If constructed, it would be the last section of the proposed master plan Regional Freeway and Highway System first proposed in 1985 by</p> <hr/> <p>http://azmemory.azlibrary.gov/edm/compoundobject/collection/statepubs/id/2318/show/8057/rec/15. ⁷³ ADOT, South Mountain Study Team, chapter 4 <i>Affected Environment, Environmental Consequences, and Mitigation</i> p. 130 available at http://www.azdot.gov/Highways/Valley_Freeways/Loop_202/South_Mountain/PDF/FHWA-AZ-EIS/04-SMDEIS-Chapter-4-Affected-Environment,-Environmental-Consequences,-Mitigation.pdf. ⁷⁴ ADOT, South Mountain Study Team chapter 5 <i>Section 4(f) Evaluation</i> at 26. ⁷⁵ City of Phoenix, South Mountain http://phoenix.gov/parks/trails/locations/south/ (last visited July 8, 2013); YouTube Fat Man’s Pass http://www.youtube.com/watch?v=EhhS86uAaAc&feature=youtu.be (last visited July 8, 2013). ⁷⁶ The saguaro is a large, tree-sized cactus species which can grow to be over 70 ft. tall. It is native to the Sonoran Desert in Arizona. The saguaro blossom is the State Wildflower of Arizona. Harming a saguaro in any manner is illegal by state law in Arizona, and when houses or highways are built, special permits must be obtained to move or destroy any saguaro affected. ⁷⁷ ADOT, South Mountain Study Team, chapter 4 <i>Affected Environment, Environmental Consequences, and Mitigation</i> at 4-9; Maricopa County has 3 interstates, 1 US route, 3 loops, and 7 state routes. (Lands of Arizona, http://www.landssofarizona.com/County-Data-For-Maricopa-County-Arizona (last visited July 8, 2013); Its public transportation includes a 57-mile transit system in Phoenix, Tempe, Mesa, Glendale and Chandler, which includes Local, LINK, Express and RAPID commuter bus service; Light rail; neighborhood circulators; rural route; dial-a-Ride; Vanpool service; and an online carpool and vanpool matching system. (Providing Public Transportation Alternatives for the Greater Phoenix Metro Area, http://www.valleymetro.org/overview (last visited June 16, 2013))</p>

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24	<p>Maricopa Association of Governments (“MAG”),⁷⁸ that when connected to a surface transportation system would allegedly: “reduce increasing congestion on the Interstate Highway System in the urban core; facilitate and more effectively distribute the regional movement of goods and delivery of services; more evenly distribute traffic on the major arterial street grid and reduce regional traffic using the grid; better serve already-occurring regional traffic; provide an alternate route for pass-through traffic; provide an integrated intermodal network of freeways strategically located to accommodate local and regional land use planning; enhance local mobility by removing regional traffic from the local road network; create infrastructure to support the regional bus transit system component of the intermodal Long Range Transportation Plan (LRTP) (MAG 2001a); encourage and direct planned growth.”⁷⁹</p> <p>Although the master plan Regional Freeway and Highway System has done without this last section, the DEIS asserts that this section is necessary. The DEIS sites that “over the past 40 years, Phoenix-area population, housing, and employment experienced some of the fastest growth in the nation...and from the early 1950s to the mid-1990s, population in the MAG region grew by over 500 percent.”⁸⁰ The DEIS assumes that population growth will continue at the same rate as it did between the 1950s to mid-1990s and that Maricopa County’s population will add an average of 1 million a decade from 2005-2035.⁸¹ The DEIS states that “almost 50 percent of projected increases in population, housing, and employment from 2005 to 2035 for the entire MAG region are expected to occur in the southwestern and southeastern portions of the Phoenix metropolitan area” and would benefit from the highway to get back and forth to central Phoenix.⁸² The DEIS cites public support of the South Mountain Loop by “Voter approval of the one-half cent sales tax in 1985 (Proposition 300) and its continued endorsement in 2004 (Proposition 400) for continued public support for investment in regional transportation projects; results from the Maricopa County Official Canvas (Maricopa County 2004a) that show voters in 90 percent of the county’s 1,058 voting precincts voted in favor of Proposition 400 and the</p> <p>⁷⁸ ADOT, South Mountain Study Team, chapter 4 <i>Affected Environment, Environmental Consequences, and Mitigation</i> at 4; Update Regional Transportation Plan p. 71 http://www.azmag.gov/Documents/RTP_2010-Annual-Report_Final_v17.pdf; The Maricopa Association of Governments (MAG) is the metropolitan planning organization (MPO) for transportation planning in the Maricopa County region; the principal planning agency for the region in air quality and water quality; and the designated agency for developing population estimates and projections for the region. (Maricopa Association of Governments, http://www.azmag.gov/). The DEIS relies on MAG’s planning from 1985 and its population projections for the proposed South Mountain highway. (Arizona Department of Transportation, Strategic Plan fiscal years 2013-2017 http://www.azdot.gov/Inside_azdot/PDF/StrategicPlan.pdf).</p> <p>⁷⁹ ADOT, South Mountain Study Team, chapter 1 <i>Purpose and Need</i> p. 4 available at http://www.azdot.gov/Highways/Valley_Freeways/Loop_202/South_Mountain/PDF/FHWA-AZ-EIS/01-SMDEIS-Chapter-1-Purpose-and-Need.pdf; ADOT’s Long Range Transportation Plan: 2010-2035 includes a list of roadway projects ordered in importance, with the South Mountain Loop taking third place. The first two are for the Hassayampa Freeway, which is part of the CANAMEX Trade Corridor, route going through Arizona, Nevada, Utah, Idaho, and Montana, and linking to the Canadian province of Alberta and the Mexican states of Sonora, Sinaloa, Nayarit, and Jalisco. It is argued by PARC, and others, that if South Mountain is created, it will be used by truck drivers looking for a bypass to more easily get through the Maricopa area; something ADOT asserts is not the purpose of the loop. Even if it is not the purpose of the loop, it would be a result of the South Mountain Loop: Since the CANAMEX route has not been put in and there is a route put in that is better than the existing roadways, truckers will use it.</p> <p>⁸⁰ ADOT, South Mountain Study Team, <i>Summary</i> at 5; Maricopa County is the most populated county in Arizona and it is also one of the largest counties in the United States, and Phoenix, the state’s capital, is its largest city. (Maricopa’s population was 3,817,117 in 2010. (United States Census Bureau, 2010 Demographic Profile http://www.census.gov/popfinder/ (last visited June 17, 2013)).</p> <p>⁸¹ ADOT, South Mountain Study Team, <i>Summary</i> at 5.</p> <p>⁸² <i>Id.</i> at 5-6.</p>

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24	Socioeconomic Projections	<p>The analyses in the Draft Environmental Impact Statement used socioeconomic and traffic projections at the regional analysis zone and traffic analysis zone levels. At the time of publication of the Draft Environmental Impact Statement, Census 2010-based socioeconomic data at the regional analysis zone and traffic analysis zone levels had not been adopted by the Maricopa Association of Governments and were not available to the project team. Therefore, the data used in the Draft Environmental Impact Statement were the most appropriate information available.</p> <p>The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future.</p> <p>The comment states in the Draft Environmental Impact Statement support of the freeway project through voter approval of Propositions 300 and 400. To clarify, the text on page 1-9 of the Draft Environmental Impact Statement states, “Voter approval of the one-half cent sales tax in 1985 (Proposition 300) and its continued endorsement in 2004 (Proposition 400) underscore continued public support for investment in regional transportation projects. Results from the Maricopa County Official Canvas (Maricopa County 2004a) indicate voters in 90 percent of the county’s 1,058 voting precincts voted in favor of Proposition 400 and the projects it would fund. Voters in 81 percent of the 31 voting precincts in the Study Area favored Proposition 400 and the projects it would fund.” The reference to the propositions only states continued voter approval for transportation infrastructure in the region.</p>

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25	<p>projects it would fund; and voters in 81 percent of the 31 voting precincts in the Study Area favored Proposition 400 and the projects it would fund.”⁸³</p> <p>The DEIS also asserts that pollution will actually be reduced, ultimately improving air quality with the South Mountain Loop 202. The stated reason for this viewpoint is that the problem with the existing roadways is traffic and congestion. With the South Mountain Loop 202, some cars would have an alternative route for driving back and forth to downtown Phoenix.</p> <p>The DEIS lays out several options, called “action alternatives” to choose from for implementing the proposal.⁸⁴ One action alternative is a no-build.⁸⁵ The DEIS evaluation concluded that the No-Build Alternative would not satisfy the projects purpose and need: the purpose and need are based on socioeconomic factors (population, housing, and employment projections); regional transportation demand (traffic and congestion); and existing and projected transportation system capacity deficiencies (present and future transportation system management, transportation demand management, transit, street network expansion, land use, and a combination of the transportation systems).⁸⁶ The DEIS states that with population growth, and its resulting increase in traffic and congestion, and even future alternative freeway modes that have been planned and would likely be funded, like for example, increasing bus routes, could not solve the purpose and need that the South Mountain Loop would fulfill. Chapter 3 states that “These alternatives alone would have limited effectiveness in reducing overall traffic congestion in the Study Area and, therefore, would not meet the purpose and need criteria; specifically, they would not adequately address projected capacity and mobility needs of the MAG region:…Based on projected regional travel demand and the extent of mobility needs of the MAG region and in the Study Area, arterial street network improvements alone would not meet the needs of the MAG region; and The Land Use Alternative is not a viable alternative because no plans exist to alter planned land uses in the region.”⁸⁷</p> <p>The build options consist of choosing one western alternative -W59, W71, and W101- and the one available eastern action alternative – E1.⁸⁸ All western alternatives begin at 1-10 (Papago Freeway) and proceed east to a common point to all on an alignment parallel and adjacent to the GRIC boundary. All alternatives would cross Union Pacific RR, Salt River, Roosevelt Canal, Laveen Area Conveyance Channel, and all require 1-10 improvement.⁸⁹</p> <p>There is only one eastern alternative because the only other alternative that ADOT had considered was a route on GRIC land, which the GRIC rejected. DEIS states “the E1 Alternative is the only action alternative developed for the Eastern Section. Despite efforts by ADOT and FHWA to seek permission to study an alternative in detail on Community land, permission has not been granted. Therefore, ADOT, with concurrence from FHWA, identified the E1 Alternative as its Preferred Alternative in the Eastern Section.”⁹⁰</p> <p>⁸³ ADOT, South Mountain Study Team, Chapter 1 <i>Purpose and Need</i> at 9. ⁸⁴ ADOT, South Mountain Study Team, <i>Summary</i> at 4. ⁸⁵ <i>Id.</i> at 8. ⁸⁶ ADOT, South Mountain Study Team, chapter 1 <i>Purpose and Need</i> at 11-13. ⁸⁷ ADOT, South Mountain Study Team, Chapter 3 <i>Alternatives</i> p. 3 available at http://www.azdot.gov/Highways/Valley_Freeways/Loop_202/South_Mountain/PDF/south-mountain-loop-202-docs/EIS/chapter3/chapter3.pdf. ⁸⁸ ADOT, South Mountain Study Team, <i>Summary</i> at 8; 38; Maricopa County is the most populated county in Arizona and it is also one of the largest counties in the United States. ⁸⁹ ADOT, South Mountain Study Team, Chapter 3 <i>Alternatives</i> at 48. ⁹⁰ ADOT, South Mountain Study Team, <i>Summary</i> at 38.</p>
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25	Air Quality	<p>The Final Environmental Impact Statement addresses the history of air quality in the region (see text beginning on page 4-68 of the Final Environmental Impact Statement). The Clean Air Act § 109(b)(1) requires the U.S. Environmental Protection Agency to promulgate primary National Ambient Air Quality Standards at levels that allow an adequate margin of safety to protect the public health. Air quality in the Phoenix metropolitan area has improved over time; Phoenix was redesignated to attainment/maintenance for carbon monoxide in 2005, and the U.S. Environmental Protection Agency recently determined that Phoenix has attained the particulate matter (PM₁₀) standard. These improvements are largely associated with cleaner fuels and lower-emission vehicles along with local controls on fugitive dust. Future emissions would also be reduced by the use of cleaner-burning fuels, technological advances in automotive design (including the greater use of alternative fuel vehicles), reformulated gasoline, gas can standards, stricter enforcement of emission standards during inspections, heavy-duty diesel engine and on-highway diesel sulfur control programs, dust control programs, and others.</p> <p>The air quality assessment for the proposed freeway analyzed impacts from carbon monoxide and particulate matter (PM₁₀) and followed U.S. Environmental Protection Agency guidelines. The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones. For mobile source air toxics, the analysis showed that for the Study Area, constructing the freeway would have a marginal effect on annual emissions in 2025 and 2035 (less than a 1 percent difference in total annual emissions between the Preferred Alternative and No-Action Alternative). With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions. The air quality analyses were updated for the Final Environmental Impact Statement, including a quantitative particulate matter (PM₁₀) analysis, and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement.</p> <p>Congestion relief resulting from the proposed freeway would provide localized air quality emissions reductions on area freeways and arterial streets and at interchanges, benefiting users of area highways and those living near congested roads.</p>

(Response 26 begin on next page)

Code	Comment Document
27	<p>The DEIS states: “based on the alternatives screening process, environmental impacts assessment, and stakeholder input, ADOT, with the concurrence from FHWA”, identified the W59 Alternative as its Preferred Alternative in the Western Section and the E1 Alternative the Eastern Section.⁹¹ This “preferred” route would be down Pecos Road in the Ahwatukee Foothills, through the western portion of the South Mountain Preserve, including through the South Mountain itself, and up 59th Avenue through Laveen.⁹² The DEIS approximates that 31.3 of the 16,600 acres of the SMPP would be taken for the proposed highway and 0.9 mile of Loop 202 would pass through the southwestern edge of South Mountain.⁹³ Cuts to South Mountain would be a 220-foot cut through one ridge, a 190-foot cut to another, and a 70-foot cut to a third for an estimated cost of \$30 million.⁹⁴</p> <p>C. ADOT AND THE DEIS ACKNOWLEDGE SACRED AND CULTURAL SIGNIFICANCE OF SOUTH MOUNTAIN</p> <p>The DEIS acknowledges that the South Mountain is sacred to the GRIC, is a TCP⁹⁵, and further, is National Register of Historic Places (“NRHP”)-eligible. The DEIS indicates that ten locations have been identified by GRIC as places of cultural importance: the South Mountains, two prehistoric village sites, an active shrine site, two prehistoric petroglyph sites, and four prehistoric trail sites, which qualify as NRHP-eligible TCPs.⁹⁶ The NRHP eligibility of two of the properties was confirmed by FHWA through consultation with the GRIC.⁹⁷ Five TCPs have been identified within the project area of “potential effects”. The DEIS specifically states that the South Mountains were determined eligible for NRHP listing as a TCP under Criteria A and B.⁹⁸</p> <p>The DEIS states: “the Community has expressed to ADOT and FHWA its concerns about an alignment through the South Mountains and the irreversible impacts on the South Mountains from the proposed action. To the Community, the South Mountains are part of a continuum of life and not an individual entity that can be isolated and analyzed.”⁹⁹</p> <p>The DEIS further acknowledges that the GRIC is opposed to any destruction of the South Mountain. It states “the mountains are considered sacred—playing a role in tribal cultures, identities, histories, and oral traditions—and appear in many creation stories. Many traditional</p> <p>⁹¹ ADOT, South Mountain Study Team, Chapter 3 <i>Alternatives</i> at 65, 69. ⁹² ADOT, South Mountain Study Team, <i>Summary</i> at 35. ⁹³ <i>Id.</i> at 13. ⁹⁴ Allison Hurtado, Ahwatukee Foothills News, <i>Environmental impact: Groups have big concerns about South Mountain Freeway</i> July 3, 2013 http://www.ahwatukee.com/news/article_115f9b36-e3a0-11e2-8a62-0019bb2963f4.html (last visited 7/3/13). ⁹⁵ ADOT, South Mountain Study Team, <i>Summary</i> at 39. ⁹⁶ ADOT, South Mountain Study Team, chapter 4 <i>Affected Environment, Environmental Consequences, and Mitigation</i> at 140. ⁹⁷ <i>Id.</i> ⁹⁸ <i>Id.</i>; Under Criteria A, properties can be eligible for the National Register if they are associated with events that have made a significant contribution to the broad patterns of American history and under Criteria B, properties may be eligible for the National Register if they are associated with the lives of persons significant in American past. (National Register Bulletin, How to Apply the National Register Criteria for Evaluation 1997 http://www.nps.gov/nr/publications/bulletins/pdfs/nrb15.pdf (last visited June 23, 2013). ⁹⁹ ADOT, South Mountain Study Team, Chapter 5 <i>Section 4(f) Evaluation</i> at 5-26.</p>

Code	Issue	Response
26	Alternatives	Several action alternatives were subject to the alternatives development and screening process; not just the E1 Alternative and alternatives located on the Gila River Indian Community (Figure 3-6 on page 3-10 of the Final Environmental Impact Statement illustrates a representation of such alternatives). Other alternatives that would have avoided the South Mountains were rejected by the Gila River Indian Community or would have had severe social and economic impacts. These alternatives would have increased costs of extraordinary magnitude Ultimately the other alternatives were eliminated from further study in the screening process and the Gila River Indian Community decided not to give permission to develop alternatives on its land (see Final Environmental Impact Statement page 3-25). The E1 Alternative when combined with the W59, W71, and W101 (and its options) Alternatives in the Western Section represents three distinct action alternatives from project termini to project termini, and therefore, represents a full range of reasonable alternatives for detailed study in the Draft and Final Environmental Impact Statements. Therefore, the Arizona Department of Transportation, with concurrence from the Federal Highway Administration, identified the E1 Alternative as the eastern section of the Preferred Alternative (which includes the W59 Alternative in the Western Section of the Study Area). In reaching its determination, the Arizona Department of Transportation sought to balance its responsibilities to address regional mobility needs while being fiscally responsible and sensitive to local communities.
27		Information noted.

Code	Comment Document
28	<p>religious and ceremonial activities continue on the mountains.”¹⁰⁰ Further, ADOT is aware that GRIC prefers the no-build alternative.¹⁰¹</p> <p>The DEIS states that their preferred-action alternative would cut through the South Mountains resulting in removing two archaeological sites identified as contributing components of the South Mountains TCP, (considered NRHP-eligible under Criteria A and D); modif(ying) the spiritual landscape of Native peoples; altering access by Native American groups to culturally important places; interfering with ceremonial practices and religious activities of some Native American groups.¹⁰²</p> <p>The DEIS also states: “two contributing components to the TCP are located within the Study Area, one of which is considered NRHP-eligible under Criterion A. The first site is...unique and possibly associated with traditional religious and ceremonial activities associated with the South Mountains. The second site is situated within the South Mountains TCP. These sites continue to function in the living Akimel O’odham and Pee Posh communities and often serve as spiritual places (Tribal Historic Preservation Officer [THPO] response [not concurrence] regarding NRHP-eligibility of the South Mountains as a TCP and its contributing components was received on August 17, 2011; consultation is ongoing).”¹⁰³</p> <p>Further, the DEIS acknowledges that the portions of the South Mountains on GRIC located on the western end serve as the “Community’s main, direct physical link to the mountains.”¹⁰⁴ Further, it states, “the E1 Alternative would result in direct use of the TCP. Approximately 3 miles of freeway alignment would pass through the mountains and would affect the southern and southwestern portions of the TCP.”¹⁰⁵</p> <p>Further, the DEIS states “While the conversion and permanent loss of part of the mountains to a transportation use by the proposed action is a concern, related Community-expressed concerns focus on impacts on history, culture, traditions, and the ability to maintain and continue the cultural identity of the communities...Within the context of the TCP, the proposed action would be a physical barrier on the landscape, altering traditional access to sacred sites, disrupting traditional cultural practices, and degrading the overall integrity of the cultural tradition and identity. Even with mitigation, implementation of the proposed action would alter the direct physical connection Community members have between their homeland and the South Mountains and would restrict the ability to visit or use these locations in a traditional cultural manner.”¹⁰⁶</p> <p>After stating all of the above, the DEIS states that “the E1 Alternative was designed in such a way as to avoid a site that is a contributing element to the South Mountains TCP, resulting in no direct use of this TCP element. A R/W fence would limit access to the site by freeway</p> <p>¹⁰⁰ ADOT, South Mountain Study Team, <i>Summary</i> at 39. ¹⁰¹ In a letter to ADOT’s Director John Halikowski in 2010, GRIC stated “despite our desire for a no-build option...the Community is willing to assist ADOT in studying potential On-Reservation alignments” in an effort to “mitigate cultural impacts to Muadag (South Mountain).” (GRIC Executive Office of the Governor & Lieutenant Governor, January 27, 2010 letter to ADOT, John Halikowski). ¹⁰² ADOT, South Mountain Study Team, chapter 4 <i>Affected Environment, Environmental Consequences, and Mitigation</i> at 129-132. ¹⁰³ ADOT, South Mountain Study Team, Chapter 5 <i>Section 4(f) Evaluation</i> at 26. ¹⁰⁴ <i>Id.</i> ¹⁰⁵ <i>Id.</i> ¹⁰⁶ <i>Id.</i> at 27.</p>

Code	Issue	Response
28		Information noted.

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29	<p>users, but Community members would continue to gain access to the site as they currently do.”¹⁰⁷</p> <p>Nevertheless, the DEIS then states, “even with mitigation, implementation of the proposed action would alter the direct physical connection Community members have between their homeland and the South Mountains and would restrict the ability to visit or use these locations in a traditional cultural manner.”¹⁰⁸</p> <p>The DEIS later states, “alternatives to avoid use of the South Mountains TCP were evaluated and determined to be not prudent and feasible.”¹⁰⁹</p> <p>The DEIS states that besides the South Mountain itself, another TCP would be affected. Although not physically damaged by the construction of the South Mountain Loop, this TCP would abut the highway and would be affected by highway related consequences, i.e. noise. The DEIS states: “AZ T:12:112 (ASM) is used by contemporary Community members actively exercising their traditional religious and ceremonial practices and beliefs. The site and its use are part of a broad pattern of traditional religious and ceremonial practices and beliefs that defined the cultural identity, continuity, and traditions of the Akimel O’odham. Therefore, the site is eligible for listing in the NRHP under Criterion A as a TCP.” However, it states, this “resource does not have noise-sensitive activities or viewshed characteristics that contribute to its importance as a Section 4(f) resource. Therefore, according to 23 C.F.R. § 774.15, no further analysis of these proximity impacts to determine whether they would substantially impair the resource is necessary.”¹¹⁰</p> <p>The DEIS concludes, “in summary, the intrusion of the proposed freeway into the South Mountains, including especially the cuts into three ridgelines, would likely be perceived as severe by many members of the Community. The above measures have been and/or would be undertaken to avoid, reduce, or otherwise mitigate impacts on the South Mountains TCP and on AZ T:12:112 (ASM). The proposed freeway would be located in an area used frequently by members of the Community, one that provides direct access to the South Mountains. Thus, the proposed action would adversely affect physical access to the TCP and adversely affect another TCP within the South Mountains TCP. Perhaps more important to members of the Community, the proposed action might be perceived as severing the Community’s spiritual connection to the mountain.”¹¹¹</p> <p>VII. ARGUMENT</p> <p>Discrimination against people on the basis of color, race, or national origin is prohibited under Title VI. Title VI provides that “No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.”¹¹² One form of discrimination prohibited is action that causes a disparate impact on a protected class of people. For the DEIS to move forward, it cannot violate Title VI.¹¹³ However, if the South Mountain Loop 202 is constructed, the distribution of negative impacts</p> <p>¹⁰⁷ <i>Id.</i> ¹⁰⁸ <i>Id.</i> ¹⁰⁹ <i>Id.</i> ¹¹⁰ <i>Id.</i> at 28. ¹¹¹ <i>Id.</i> ¹¹² 42 U.S.C § 2000d. ¹¹³ ADOT, South Mountain Study Team, <i>Summary</i> at 12.</p>
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Code	Issue	Response
29		Information noted
30	Cultural Resources, Title VI	<p>The cultural and religious places of importance, like the South Mountains, are acknowledged in the Draft Environmental Impact Statement in several locations, notably pages 4-132 and 5-26.</p> <p>The section entitled <i>Title VI and Environmental Justice</i>, beginning on page 4-29 in the Draft Environmental Impact Statement, presents acceptable methods, data, and assumptions to assess the potential for disproportionately high and adverse effects from the proposed action on environmental justice populations and disparate impacts to populations protected under Title VI. Based upon the content of the section, no such effects would result from the action alternatives.</p> <p>In light of comments received on the Draft Environmental Impact Statement, the above-referenced conclusions were confirmed in the preparation of the Final Environmental Impact Statement. To provide further clarity, the discussions of environmental justice and Title VI were separated and additional text explaining the relationship of environmental justice and Title VI to various environmental elements was added throughout Chapter 4, <i>Affected Environment, Environmental Consequences, and Mitigation</i>, as exemplified by the inserted text on page 4-29 of the Final Environmental Impact Statement.</p> <p>A representative impact is the Gila River Indian Community member-expressed concern that the E1 Alternative would interfere with ceremonial practices and religious activities of some Native American groups. While impacts on the South Mountains Traditional Cultural Property would be substantial and unique in context, the direct conversion of lands to a transportation use would be limited to less than 0.2 percent of Phoenix South Mountain Park/Preserve and would not prohibit ongoing access and the cultural and religious practices by Native American tribes. Mitigation measures and measures to minimize harm as the result of extensive consultation, avoidance alternatives analyses, and efforts in developing mitigation strategies would accommodate and preserve (to the fullest extent possible from the available alternatives) access to the South Mountains for religious purposes. Text relating to this mitigation can be found on pages 4-38, 4-42, and 4-44 of the Final Environmental Impact Statement. Additionally, the section, <i>Mitigation</i>, beginning on page 4-158, presents several measures (e.g., multifunctional crossings, contributing element avoidance) to mitigate effects on cultural resources. The section, <i>Measures to Minimize Harm</i>, beginning on page 5-27, presents several measures to reduce effects on the South Mountains Traditional Cultural Property and other cultural resources. Even if one were to reach a contrary conclusion and determine that disproportionately high and adverse and/or disparate effects would occur as a result of the proposed freeway, there is substantial justification for the proposed freeway. It is needed to serve projected growth in population and accompanying transportation demand and to correct existing and projected transportation system deficiencies (see Chapter 1, <i>Purpose and Need</i>). There is no feasible and prudent alternative to the use of the South Mountains, as discussed in Chapter 5, <i>Section 4(f) Evaluation</i>.</p> <p>The Arizona Department of Transportation and Federal Highway Administration provided equal access to the public participation process to the Gila River Indian Community and its members. The Arizona Department of Transportation and Federal Highway Administration solicited input from the Gila River Indian Community and other Native American tribes and tribal members and fully considered input and comments that were received.</p>

Code	Comment Document
31	<p>and burdens¹¹⁴ would be highly unequal to the GRIC and for the foregoing reasons, Title VI was violated by ADOT because:</p> <ul style="list-style-type: none">the proposed route through South Mountain would knowingly, improperly, and illegally desecrate a site with profound sacred and spiritual significance resulting in an unjustifiable disparate impact on the GRIC;construction and the effects of vehicle and truck traffic on the proposed South Mountain Loop 202 would result in pollution causing disproportionate cumulative health effects causing a disparate impact on the GRIC and its tribal members, including members of GRACE, and;inadequate consultation and inadequate process was given to the GRIC. <p>A. SOUTH MOUNTAIN LOOP 202 DISPARATE CUMULATIVE SPIRITUAL AND CULTURAL EFFECTS ON THE GRIC, INCLUDING GRACE COMPLAINANTS</p> <p>GRIC grievances about the proposed South Mountain Loop 202 have common themes. Like the following, they identify the great cultural and spiritual meaning the South Mountain signifies to the GRIC: “our people feel that the mountain is a sacred place and we should respect it,”¹¹⁵ “we need to protect it because that mountain is sacred to our people,”¹¹⁶ “you don’t know what it means to us having the mountain there, it won’t be the same if it should be gone,”¹¹⁷ and “when I was younger I recall being taught about our people’s heritage...I remember being taught by my elders that we come from South Mountain.”¹¹⁸ See attachments. Another GRIC tribal member stated “as we were growing up we were taught that our land was sacred and that we need to protect it at all cost. South Mountain...is one of our sacred mountains.”¹¹⁹ See attachment. Plainly put, construction of the South Mountain Loop 202 would desecrate a natural landscape with profound sacred and spiritual significance to the GRIC. One GRIC tribal member wrote that “my connection to South Mountain is that it is a very sacred place to me and my people.”¹²⁰ See attachment. Another said “it is a sacred mountain to our people...and...it was most sacred to our ancestors...there are stories about that mountain I was told by my elders, and there are plants that grow on this mountain that we use today for healing, eating, and blessings.”¹²¹ See attachment.</p> <p>Cutting and blasting the South Mountain to place a highway through it would result in a major disparate impact on the GRIC. One tribal member stated “the mountain is central to the</p> <p>¹¹⁴ This is not the first time that the GRIC would have to carry the burden of a transportation project: Arizona “renege[d] on promises to build interchanges and frontage roads on Interstate 10, which ADOT had offered in return for allowing an interstate to bisect the reservation.” (Sean Holstege, <i>The Republic, 1998 plan for South Mountain Freeway passed</i>, March 25, 2013 http://www.azcentral.com/community/ahwatukee/articles/20130308south-mountain-freeway-plan-ignored.html (last visited July 11, 2013)). Further, the GRIC just recently got reimbursed by ADOT for allowing I-10 on the reservation.</p> <p>¹¹⁵ Beonka Thomas, GRIC tribal member, Aff. July 3, 2013.</p> <p>¹¹⁶ Laverne Thomas, GRIC tribal member, Aff. July 8, 2013.</p> <p>¹¹⁷ Stephanie Thomas, GRIC tribal member, Aff. July 8, 2013.</p> <p>¹¹⁸ Laura Thomas, GRIC tribal member/GRACE member, Aff. ¶ 2.</p> <p>¹¹⁹ Daniel Hernandez, GRIC tribal member Aff. ¶ 1.</p> <p>¹²⁰ Nicole Johns, GRIC tribal member Aff. ¶ 1 June 29, 2013.</p> <p>¹²¹ Winnona Catha, GRIC tribal member Aff. ¶ ¶ 1-2 July 2, 2013.</p>

Code	Issue	Response
30 (cont.)		<p>Chapter 2 of the Final Environmental Impact Statement is dedicated to the explanation of the Gila River Indian Community outreach undertaken for the project. Chapter 6 of the Final Environmental Impact Statement further describes Gila River Indian Community outreach throughout the process. The Gila River Indian Community was provided equal opportunities to participate in the project as all other populations and agencies. This outreach was undertaken, in part, to ensure all populations had equal access to the process and, in part, to ensure disparate nor disproportionate and highly adverse impacts would result from the construction and operation of the proposed action.</p>
31	Air Quality	<p>The section entitled <i>Title VI and Environmental Justice</i>, beginning on page 4-29 in the Draft Environmental Impact Statement, presents acceptable methods, data, and assumptions to assess the potential for disproportionately high and adverse effects from the proposed action on environmental justice populations and disparate impacts to populations protected under Title VI. Based upon the content of the section, no such effects would result from the action alternatives.</p> <p>In light of comments received on the Draft Environmental Impact Statement, the above-referenced conclusions were confirmed in the preparation of the Final Environmental Impact Statement. To provide further clarity, the discussions of environmental justice and Title VI were separated and additional text explaining the relationship of environmental justice and Title VI to various environmental elements was added throughout Chapter 4, <i>Affected Environment, Environmental Consequences, and Mitigation</i>, as exemplified by the inserted text on page 4-29 of the Final Environmental Impact Statement.</p> <p>With respect to air quality, the Final Environmental Impact Statement addresses the history of air quality in the region (see text beginning on page 4-68 of the Final Environmental Impact Statement). The Clean Air Act § 109(b)(1) requires the U.S. Environmental Protection Agency to promulgate primary National Ambient Air Quality Standards at levels that allow an adequate margin of safety to protect the public health. Air quality in the Phoenix metropolitan area has improved over time; Phoenix was redesignated to attainment/maintenance for carbon monoxide in 2005, and the U.S. Environmental Protection Agency recently determined that Phoenix has attained the particulate matter (PM₁₀) standard. These improvements are largely associated with cleaner fuels and lower-emission vehicles along with local controls on fugitive dust. Future emissions would also be reduced by the use of cleaner-burning fuels, technological advances in automotive design (including the greater use of alternative fuel vehicles), reformulated gasoline, gas can standards, stricter enforcement of emission standards during inspections, heavy-duty diesel engine and on-highway diesel sulfur control programs, dust control programs, and others.</p> <p>The air quality assessment for the proposed freeway analyzed impacts from carbon monoxide and particulate matter (PM₁₀) and followed U.S. Environmental Protection Agency guidelines. The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones. For mobile source air toxics, the analysis showed that for the Study Area, constructing the freeway would have a marginal effect on annual emissions in 2025 and 2035 (less than a 1 percent difference in total annual emissions between the Preferred Alternative and No-Action Alternative). With the Preferred Alternative in 2035, modeled mobile</p>

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32	<p>and burdens¹¹⁴ would be highly unequal to the GRIC and for the foregoing reasons, Title VI was violated by ADOT because:</p> <ul style="list-style-type: none">the proposed route through South Mountain would knowingly, improperly, and illegally desecrate a site with profound sacred and spiritual significance resulting in an unjustifiable disparate impact on the GRIC;construction and the effects of vehicle and truck traffic on the proposed South Mountain Loop 202 would result in pollution causing disproportionate cumulative health effects causing a disparate impact on the GRIC and its tribal members, including members of GRACE, and;inadequate consultation and inadequate process was given to the GRIC. <p>A. SOUTH MOUNTAIN LOOP 202 DISPARATE CUMULATIVE SPIRITUAL AND CULTURAL EFFECTS ON THE GRIC, INCLUDING GRACE COMPLAINANTS</p> <p>GRIC grievances about the proposed South Mountain Loop 202 have common themes Like the following, they identify the great cultural and spiritual meaning the South Mountain signifies to the GRIC: “our people feel that the mountain is a sacred place and we should respect it,”¹¹⁵ “we need to protect it because that mountain is sacred to our people,”¹¹⁶ you don’t know what it means to us having the mountain there, it won’t be the same if it should be gone,”¹¹⁷ and “when I was younger I recall being taught about our people’s heritage...I remember being taught by my elders that we come from South Mountain.”¹¹⁸ See attachments. Another GRIC tribal member stated “as we were growing up we were taught that our land was sacred and that we need to protect it at all cost. South Mountain...is one of our sacred mountains.”¹¹⁹ See attachment. Plainly put, construction of the South Mountain Loop 202 would desecrate a natural landscape with profound sacred and spiritual significance to the GRIC. One GRIC tribal member wrote that “my connection to South Mountain is that it is a very sacred place to me and my people.”¹²⁰ See attachment. Another said “it is a sacred mountain to our people...and...it was most sacred to our ancestors...there are stories about that mountain I was told by my elders, and there are plants that grow on this mountain that we use today for healing, eating, and blessings.”¹²¹ See attachment.</p> <p>Cutting and blasting the South Mountain to place a highway through it would result in a major disparate impact on the GRIC. One tribal member stated “the mountain is central to the</p> <p>¹¹⁴ This is not the first time that the GRIC would have to carry the burden of a transportation project: Arizona “renege[d] on promises to build interchanges and frontage roads on Interstate 10, which ADOT had offered in return for allowing an interstate to bisect the reservation.” (Sean Holstege, <i>The Republic, 1998 plan for South Mountain Freeway passed</i>, March 25, 2013 http://www.azcentral.com/community/ahwatukee/articles/20130308south-mountain-freeway-plan-ignored.html (last visited July 11, 2013). Further, the GRIC just recently got reimbursed by ADOT for allowing I-10 on the reservation.</p> <p>¹¹⁵ Beonka Thomas, GRIC tribal member, Aff. July 3, 2013.</p> <p>¹¹⁶ Laverne Thomas, GRIC tribal member, Aff. July 8, 2013.</p> <p>¹¹⁷ Stephanie Thomas, GRIC tribal member, Aff. July 8, 2013.</p> <p>¹¹⁸ Laura Thomas, GRIC tribal member/GRACE member, Aff. ¶ 2.</p> <p>¹¹⁹ Daniel Hernandez, GRIC tribal member Aff. ¶ 1.</p> <p>¹²⁰ Nicole Johns, GRIC tribal member Aff. ¶ 1 June 29, 2013.</p> <p>¹²¹ Winnona Catha, GRIC tribal member Aff. ¶ ¶ 1-2 July 2, 2013.</p>

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31 (cont.)		<p>source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions. The air quality analyses were updated for the Final Environmental Impact Statement, including a quantitative particulate matter (PM₁₀) analysis, and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement.</p> <p>Congestion relief resulting from the proposed freeway would provide localized air quality emissions reductions on area freeways and arterial streets and at interchanges, benefiting users of area highways and those living near congested roads.</p> <p>Further, the Arizona Department of Transportation and Federal Highway Administration provided equal access to the public participation process to the Gila River Indian Community and its members. The Arizona Department of Transportation and Federal Highway Administration solicited input from the Gila River Indian Community and other Native American tribes and tribal members and fully considered input and comments that were received.</p> <p>Chapter 2 of the Final Environmental Impact Statement is dedicated to the explanation of the Gila River Indian Community outreach undertaken for the project. Chapter 6 of the Final Environmental Impact Statement further describes Community outreach throughout the process. The Gila River Indian Community was provided equal opportunities to participate in the project as all other populations and agencies. This outreach was undertaken, in part, to ensure all populations had equal access to the process and, in part, to ensure disparate nor disproportionately high adverse impacts would result from the construction and operation of the proposed action.</p>
32	Tribal Involvement	<p>The Arizona Department of Transportation and Federal Highway Administration provided equal access to the public participation process to the Gila River Indian Community and its members. The Arizona Department of Transportation and Federal Highway Administration solicited input from the Gila River Indian Community and other Native American tribes and tribal members and considered fully the substantive input and comments that were received.</p> <p>Chapter 2 of the Final Environmental Impact Statement is dedicated to the explanation of the Gila River Indian Community outreach undertaken for the project. The Gila River Indian Community was provided the same opportunities to participate in the project as all other populations and agencies.</p> <p>The Arizona Department of Transportation advertisement efforts of the public hearing and public forums are documented in Chapter 6 of the Final Environmental Impact Statement beginning on page 6-23. The Gila River Indian Community Communication and Public Affairs Office informed the Arizona Department of Transportation that all communication and distribution of informational materials on Gila River Indian Community land would be handled by the Communication and Public Affairs Office. Advertisement text regarding the project, the public comment period, the public hearing, and the various ways for the public to submit comments regarding the South Mountain Freeway Draft Environmental Impact Statement was given to the Gila River Indian Community’s Public Information Officer at the Transportation Technical Team meeting on April 30, 2013. Two advertisements regarding the public hearing, information regarding the location and availability of the Draft Environmental Impact Statement, and a map of the alternatives was placed in the May 2013 monthly issue of the <i>Gila River Indian News</i>.</p>

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33	<p>and burdens¹¹⁴ would be highly unequal to the GRIC and for the foregoing reasons, Title VI was violated by ADOT because:</p> <ul style="list-style-type: none">the proposed route through South Mountain would knowingly, improperly, and illegally desecrate a site with profound sacred and spiritual significance resulting in an unjustifiable disparate impact on the GRIC;construction and the effects of vehicle and truck traffic on the proposed South Mountain Loop 202 would result in pollution causing disproportionate cumulative health effects causing a disparate impact on the GRIC and its tribal members, including members of GRACE, and;inadequate consultation and inadequate process was given to the GRIC. <p>A. SOUTH MOUNTAIN LOOP 202 DISPARATE CUMULATIVE SPIRITUAL AND CULTURAL EFFECTS ON THE GRIC, INCLUDING GRACE COMPLAINANTS</p> <p>GRIC grievances about the proposed South Mountain Loop 202 have common themes. Like the following, they identify the great cultural and spiritual meaning the South Mountain signifies to the GRIC: “our people feel that the mountain is a sacred place and we should respect it,”¹¹⁵ “we need to protect it because that mountain is sacred to our people,”¹¹⁶ you don’t know what it means to us having the mountain there, it won’t be the same if it should be gone,”¹¹⁷ and “when I was younger I recall being taught about our people’s heritage...I remember being taught by my elders that we come from South Mountain.”¹¹⁸ See attachments. Another GRIC tribal member stated “as we were growing up we were taught that our land was sacred and that we need to protect it at all cost. South Mountain...is one of our sacred mountains.”¹¹⁹ See attachment. Plainly put, construction of the South Mountain Loop 202 would desecrate a natural landscape with profound sacred and spiritual significance to the GRIC. One GRIC tribal member wrote that “my connection to South Mountain is that it is a very sacred place to me and my people.”¹²⁰ See attachment. Another said “it is a sacred mountain to our people...and...it was most sacred to our ancestors...there are stories about that mountain I was told by my elders, and there are plants that grow on this mountain that we use today for healing, eating, and blessings.”¹²¹ See attachment.</p> <p>Cutting and blasting the South Mountain to place a highway through it would result in a major disparate impact on the GRIC. One tribal member stated “the mountain is central to the</p> <p>¹¹⁴ This is not the first time that the GRIC would have to carry the burden of a transportation project: Arizona “renege[d] on promises to build interchanges and frontage roads on Interstate 10, which ADOT had offered in return for allowing an interstate to bisect the reservation.” (Sean Holstege, <i>The Republic, 1998 plan for South Mountain Freeway passed</i>, March 25, 2013 http://www.azcentral.com/community/ahwatukee/articles/20130308south-mountain-freeway-plan-ignored.html (last visited July 11, 2013). Further, the GRIC just recently got reimbursed by ADOT for allowing I-10 on the reservation.</p> <p>¹¹⁵ Beonka Thomas, GRIC tribal member, Aff. July 3, 2013.</p> <p>¹¹⁶ Laverne Thomas, GRIC tribal member, Aff. July 8, 2013.</p> <p>¹¹⁷ Stephanie Thomas, GRIC tribal member, Aff. July 8, 2013.</p> <p>¹¹⁸ Laura Thomas, GRIC tribal member/GRACE member, Aff. ¶ 2.</p> <p>¹¹⁹ Daniel Hernandez, GRIC tribal member Aff. ¶ 1.</p> <p>¹²⁰ Nicole Johns, GRIC tribal member Aff. ¶ 1 June 29, 2013.</p> <p>¹²¹ Winnona Catha, GRIC tribal member Aff. ¶ ¶ 1-2 July 2, 2013.</p>

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32 (cont.)		<p>The Arizona Department of Transportation Community Relations distributed electronic notices (e-newsletters) through the Government Delivery system to over 12,000 constituents who voluntarily signed up for project alerts along Interstate 10 (Papago, Maricopa, and Santan Freeways). These electronic notices included notice of availability of Draft Environmental Impact Statement (distributed on April 26, 2013); date of the public hearing (distributed on May 10, 2013); dates of the community forums (distributed on May 29, 2013); and notification in June of the close of the Draft Environmental Impact Statement public comment period. In addition, anyone who had attended a previous meeting on the proposed action and signed in received all of this information mailed individually. On May 6, 2013, 73,564 mailers were distributed to addresses within the Study Area.</p> <p>The Arizona Department of Transportation provided vouchers for public hearing parking and for public transit to the hearing. For the first time in the State’s history, a shuttle bus to the hearing was provided from six locations in the Phoenix area, including two on the Gila River Indian Community (Komatke Boys & Girls Club and the Governance Center in Sacaton). All ads provided telephone numbers and electronic contact information regarding information on the shuttle schedules and pick-up locations.</p>
33	Title VI, Cultural Resources	<p>The section entitled <i>Title VI and Environmental Justice</i>, beginning on page 4-29 in the Draft Environmental Impact Statement, presents acceptable methods, data, and assumptions to assess the potential for disproportionately high and adverse effects from the proposed action on environmental justice populations and disparate impacts to populations protected under Title VI. Based upon the content of the section, no such effects would result from the action alternatives.</p> <p>In light of comments received on the Draft Environmental Impact Statement, the above-referenced conclusions were confirmed in the preparation of the Final Environmental Impact Statement. To provide further clarity, the discussions of environmental justice and Title VI were separated and additional text explaining the relationship of environmental justice and Title VI to various environmental elements was added throughout Chapter 4, <i>Affected Environment, Environmental Consequences, and Mitigation</i>, as exemplified by the inserted text on page 4-29 of the Final Environmental Impact Statement.</p> <p>The cultural and religious places of importance, like the South Mountains, are acknowledged in the Draft Environmental Impact Statement in several locations, notably pages 4-132 and 5-26. The proposed project would accommodate and preserve (to the fullest extent possible from the available alternatives) access to the South Mountains for religious practices.</p> <p>Since the beginning of the environmental impact statement process, the Federal Highway Administration and Arizona Department of Transportation have been carrying out cultural resource studies and engaging in an ongoing, open dialogue with the Gila River Indian Community Tribal Historic Preservation Office regarding the identification and evaluation of places of religious and cultural importance to the Gila River Indian Community that may be adversely affected by the proposed freeway. Such places are referred to as traditional cultural properties. As a result of these discussions and of studies conducted by the Gila River Indian Community’s Cultural Resource Management Program, the Gila River Indian Community has identified traditional cultural properties that are eligible for listing in the National Register of Historic Places and that could be affected by construction of the proposed freeway. In certain cases, listing these properties on the National Register of Historic Places may offer them protection under Section 4(f) of the Department of Transportation</p>

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33	<p>O’odham creation story and continues to be a place to hold ceremonies by and for the O’odham people. The mountain is also sacred to us because of the plant life we use for medicinal and ceremonial purposes and also because of the wildlife we hunt to sustain ourselves. The construction of this freeway would greatly harm the wellbeing of the mountain and therefore will bring harm to the O’odham.”¹²² See attachment.</p> <p>South Mountain is a very major and significant part of the GRIC spiritual and cultural life. It is a place of importance with esteemed meaning: it is associated with integrity, strength, patience and offers innumerable cultural and spiritual benefits to the GRIC. It has been there on the landscape and has withstood time and the elements in good and bad times with generations of GRIC ancestors. Becoming a major historical and spiritual theme in the GRIC’s lives, stories, teachings, rituals, ceremonies, and medicines are derived from South Mountain. One tribal member stated “South Mountain is important to me because it’s part of our heritage. There are many teachings that go with that mountain. Stories and songs that our generations to carry on.”¹²³ See attachment. Another stated “according to our oral history South Mountain is a sacred mountain to our people. Akimel O’odham legends and stories talk about South Mountain being the home of the deity for our tribe. There are also stories about artifacts and petroglyphs from our ancestors the Hohokam located on South Mountain.”¹²⁴ See attachment. Another GRIC tribal member stated “Oral history and legends state that South Mountain is the home of “Elder Brother” (I’itoi) deity of the Akimil O’odham Tribe (Gila River Indian Community Tribe). South Mountain was also once inhabited by our ancestors the Hohokam. The Hohokam has been acknowledged by archeologist, anthropologist and historians to be one of the first settlers of this region. South Mountain is also a place of worship, sacred ceremonies are performed, prayer and blessings are given and shrines are built to honor I’itoi and our ancestors.”¹²⁵ See attachment.</p> <p>Disturbing South Mountain would be desecrating it and desecrating it would be harming the GRIC itself –“to take the South Mountain away is a great impact to the Gila River Indian Community. It would be losing a part of us even more.”¹²⁶ See attachment. “To hear of this mountain being destroyed has put a great hurt in my spiritual life...The mountain has given me much in my life. It has kept me strong, sane, peaceful, and healthy.”¹²⁷ See attachment. Much harm would occur because this significant historical and cultural site that has been handed down through the generations is rich with the past: its heritage reaches into the present and connects with the GRIC living today. One tribal member stated “I have a very strong connection to South Mountain. In my late teens I left my hometown of Ajo, Arizona to attend Arizona State University. As a young woman far from home it was a difficult adjustment to live in the city, but going to South Mountain helped with this transition...as a young mother raising a child in the late sixties/early seventies, I often went to south Mountain to meditate when times became tough or if I was unable to return to Gila River for family emergencies. South Mountain has always made me feel closer to home and closer to my O’odham Himdag.”¹²⁸ See attachment.</p> <p>¹²² Renee Jackson, GRIC tribal member Aff. ¶ 2. ¹²³ Fairietta Morago, GRIC tribal member Aff. ¶ 1. ¹²⁴ Peggy Mae Morago, GRIC tribal member Aff. ¶ 2 July 6, 2013. ¹²⁵ Joseph Morago, GRIC tribal member/GRACE member, Aff. ¶ 2 July 22, 2013. ¹²⁶ Fairietta Morago, GRIC tribal member Aff. ¶ 1. ¹²⁷ Bernadette Stevens, GRIC tribal member Aff. ¶¶ 4-5 July 2, 2013. ¹²⁸ Peggy Mae Morago, GRIC tribal member Aff. ¶ 2 July 6, 2013.</p>

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33 (cont.)		<p>Act. The traditional cultural properties identified are culturally important to other Native American tribes as well. For more discussion of traditional cultural properties, see the section, <i>Cultural Resources</i>, beginning on page 4-140 of the Final Environmental Impact Statement and pages 5-26 through 5-28.</p> <p>Section 106 of the National Historic Preservation Act requires a government-to-government relationship between the Federal Government and Indian tribes as described beginning on page 4-140 of the Final Environmental Impact Statement. Section 106 requires that federal agencies take into account the effects of their undertakings on historic properties. This process requires consultation with tribal authorities. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. The consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Register of Historic Places eligibility recommendations (including traditional cultural properties), project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.</p> <p>The mitigation measures were suggested in a letter from the Lieutenant Governor of the Gila River Indian Community to the Administrator, Arizona Division, Federal Highway Administration, dated June 23, 2010 (see page A372 of Appendix 2-1 of the Final Environmental Impact Statement). In this letter, the Gila River Indian Community submitted a proposal to address partial measures for the mitigation of adverse effect from the Pecos Road Alignment of the South Mountain Freeway. The Gila River Indian Community’s proposal found the engineering solutions acceptable, but stated that implementation and construction of the proposed freeway would require further consultation. In committing to the evaluation of the South Mountains Traditional Cultural Property, the Arizona Department of Transportation and Federal Highway Administration also committed to the Gila River Indian Community’s participation in ongoing engineering design refinements and acknowledged the importance of all plants and animals in the traditional culture of the Akimel O’odham and Pee Posh of the Gila River Indian Community.</p>

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33	<p>GRIC and GRIC tribal members in GRACE¹²⁹ have repeatedly and publicly communicated the sacred significance of South Mountain, while at the same time, opposing ADOT's actions and the South Mountain Loop 202 project. However, ADOT has consistently ignored these communications and continued its efforts to plan the South Mountain Loop 202 through the South Mountain. One tribal member lamented "you may see the Mountain as an obstacle! But we see it as a refuge for our animals, a place where we can take our children and teach them our culture. It may not seem like a lot but the Mountain means so much to our community."¹³⁰ See attachment.</p> <p>In April 29, 2008, the Arizona Republic published an article entitled, <i>Gila resolution calls freeway path 'sacred land'</i>.¹³¹ The article reads: "The (GRIC) council in April 2007 designated the South Mountain Range as "a sacred place/traditional cultural property" that must not be violated. The council said any alteration of the range "for any purpose would be a violation of the cultural and religious beliefs of the Gila River Indian Community."¹³²</p> <p>Nevertheless, ADOT's August 2008 Draft Technical Report Summary states "direct impacts on cultural resources from construction could result in their partial or total loss."¹³³ It goes on to state "archaeological sites and places considered culturally important by Native American groups would be affected by any of the build alternatives. The Gila River Indian Community (GRIC) and the Salt River Pima-Maricopa Indian Community have both passed Tribal Resolutions designating the South Mountains as a TCP and the Colorado River Indian tribes have said that they also consider the South Mountains a TCP. The Federal Highway Administration (FHWA) and the Arizona Department of Transportation (ADOT) recognize the South Mountains as a TCP."¹³⁴</p> <p>During a MAG public comment meeting on the South Mountain Loop 202 on December 21, 2009, GRIC tribal members and supporters pled with the government association to stop their plans to go through the South Mountain and "respect the heritage of their peoples."¹³⁵ With a banner outside stating "standing against those who ruin the land" tribal members expressed their "deep and abiding love" for South Mountain and their "responsibility to protect" it for their ancestors and future generations.¹³⁶ One youth stated: "this pressure has to stop...we had a river taken away...our lands have been reduced enough...our ancestors should not have had to go through what they did for a highway to go basically past their cemetery."¹³⁷ A speaker from Protecting Arizona's Resources and Children ("PARC") pointed out that GRIC at that time was</p> <p>¹²⁹ GRACE has spent extensive time and resources during the planning and preparing of the DEIS by attending the various South Mountain Freeway meetings, speaking out to the media communicating the sacredness of the South Mountain, and urging the government to choose an alternative transportation mode that would not desecrate the GRIC's cultural heritage.</p> <p>¹³⁰ Daniel Hernandez, GRIC tribal member Aff. ¶ 1.</p> <p>¹³¹ Colleen Sparks, The Arizona Republic , <i>Gila resolution calls freeway path 'sacred land'</i> Apr. 29, 2008 found at http://www.azdot.gov/Highways/Valley_Freeways/Loop_202/South_Mountain/articles/PDF/042908AZREP.pdf.</p> <p>¹³² <i>Id.</i></p> <p>¹³³ ADOT, South Mountain Transportation Corridor Study Citizens Advisory Team Draft Technical Report Summary Cultural Resources August 28, 2008 p. 2 available at http://www.azdot.gov/southmountainfreeway/PDF/082808_SMCAT_CulturalResources_Summary_Final.pdf.</p> <p>¹³⁴ <i>Id.</i> at 4.</p> <p>¹³⁵ YouTube, South Mountain Freeway Proposal - Public Comments pt 1, Dec. 21, 2009 https://www.youtube.com/watch?v=IMws03pJ0iE (last visited June 17, 2013).</p> <p>¹³⁶ <i>Id.</i></p> <p>¹³⁷ <i>Id.</i></p>
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34	Cultural Resources, No-Action Alternative	<p>The cultural and religious places of importance, like the South Mountains, are acknowledged in the Draft Environmental Impact Statement in several locations, notably pages 4-132 and 5-26. The proposed project would accommodate and preserve (to the fullest extent possible from the available alternatives) access to the South Mountains for religious practices.</p> <p>The Arizona Department of Transportation and Federal Highway Administration acknowledge the expressed comments of Gila River Indian Community members as referenced in the GRACE comment. Several measures to avoid the use of a portion of the mountains, including tunneling, bridging, and rerouting were fully examined but, for reasons explained fully in Chapters 3 and 5 of the Draft and Final Environmental Impact Statements, were eliminated from detailed study in the environmental impact statement process.</p> <p>Use of the mountains for the purposes of the proposed freeway represents two-tenths of one percent of the total mountain range. Since 1988, and as part of this environmental impact statement process, several measures have been undertaken and will be undertaken to further reduce effects on the mountains. These measures, including narrowing the design footprint, acquiring replacement land immediately adjacent to the mountains, and the provision of highway crossings, are outlined in text beginning on page 5-23 of the Draft Environmental Impact Statement.</p> <p>In addition, Section 106 of the National Historic Preservation Act requires a government-to-government relationship between the Federal Government and Indian tribes as described beginning on page 4-140 of the Final Environmental Impact Statement. Section 106 requires that federal agencies take into account the effects of their undertakings on historic properties. This process requires consultation with tribal authorities as noted in the beginning of this response. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. The consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Register of Historic Places eligibility recommendations (including traditional cultural properties), project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.</p>

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33	<p>being pressured to permit a highway either through their limited reservation or through sacred ancestral land abutting their reservation –both of which have sacred and traditional values.¹³⁸</p> <p>Also in that meeting, GRIC tribal members shared how their ancestors are a part of the “sacred territory” of South Mountain and how the tribal members of GRIC continue to be defined by it.¹³⁹ One tribal member expressed his concern that this desecration was “just another attempt to take more land” from indigenous people, whose historical legacy was one of losing more and more of their land by non-indigenous people.¹⁴⁰ He furthered shared with the audience how South Mountain is where their “creator started” and reiterated that it is a “sacred area that cannot be touched.”¹⁴¹ Another speaker stated his elders taught him that South Mountain “can’t be disturbed and if disturbed, would cause problems” to the world.¹⁴² Another stated that “this (cultural land of his ancestors) is what binds us together”; and another stated that “desecration of the South Mountain would break and kill them.”¹⁴³ Another pointed out to the audience the compromises the tribal members have already had to make like having to tolerate sacred places in the SMPP being desecrated with graffiti and trash.¹⁴⁴ She said it was unfair and wrong that now they are expected to permit their sacred South Mountain to be bulldozed for a highway.</p> <p>GRACE co-founder, Lori Riddle, also spoke to the audience during the 2009 MAG public comment meeting. She stated that GRACE was opposed to the project because the proposal “impead(s) on fundamental “cultural sensitivities” of indigenous peoples of the GRIC.”¹⁴⁵ Further she said, the GRIC “honor the land...honor the mountains.”¹⁴⁶ This is where they “pray...fast...prepare...gather...strength.”¹⁴⁷ This is “a heritage that goes back hundreds and thousands of years.”¹⁴⁸ Frustrated with ADOT’s failure to respect tribal concerns about the proposed desecration of the sacred mountain, Riddle had to say once again “the community has already chose(n) not to have a highway.”¹⁴⁹</p> <p>The November, 11, 2009, Ahwatukee Foothills News article, <i>Questions remain on blasting into South Mountain</i>, questioned the soundness of “blasting through...major ridges of South Mountain in the park, which the Gila River Indian Community (GRIC) considers sacred.” It went on to quote Shannon Rivers, a member of GRIC, who said that the South Mountain “has burial sites, archeological sites and shrines.” The article also quoted Lori Riddle’s concerns with cutting into the ridges of the sacred South Mountain. Riddle stated, “when they talk about</p> <p>¹³⁸ <i>Id.</i> In 2009, a route through the reservation was being pressured on the GRIC. ¹³⁹ YouTube, South Mountain Freeway Protest, https://www.youtube.com/watch?v=IMws03pJ0iE (last visited June 17, 2013). ¹⁴⁰ YouTube, South Mountain Freeway Proposal - Public Comments /Part 1 found at http://www.youtube.com/watch?v=tZ8MWrOX8eQ. ¹⁴¹ <i>Id.</i> ¹⁴² <i>Id.</i> ¹⁴³ <i>Id.</i> ¹⁴⁴ <i>Id.</i>; Only certain tribal members are allowed even in the sacred places and only certain tribal members knowledgeable and skilled do ceremonies in the sacred places. ¹⁴⁵ YouTube, South Mountain Freeway Proposal - Public Comments /Part 2 Dec. 21, 2009, https://www.youtube.com/watch?v=zGW3LwbaI5Y (last visited June 17, 2013). ¹⁴⁶ <i>Id.</i> ¹⁴⁷ <i>Id.</i> ¹⁴⁸ <i>Id.</i> ¹⁴⁹ <i>Id.</i></p>
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34 (cont.)		<p>In terms of the comment’s reference to pressures to locate a freeway on Gila River Indian Community land, as stated on page 3-24 of the Final Environmental Impact Statement, in January 2010, the Arizona Department of Transportation Director received a letter from the Gila River Indian Community Governor, who indicated that the Gila River Indian Community was willing to assist in conducting a study of the proposed South Mountain Freeway on Gila River Indian Community land. In response, the project team conducted preliminary analyses of projected engineering issues, cultural resources impacts, natural resources, multiuse crossings, air quality impacts, noise level impacts, socioeconomic impacts, and Section 4(f) issues. Following this effort, a coordinated referendum of Gila River Indian Community members to favor or oppose construction of the proposed South Mountain Freeway on Gila River Indian Community land or to support a no-build option occurred in February 2012. Gila River Indian Community members voted in favor of the no-build option. The Gila River Indian Community’s position regarding a “no-build” option was considered in the Draft and Final Environmental Impact Statements. That position is formally known as the No-Action Alternative and was evaluated in depth in assessments of the impacts of the proposed action on each resource. Any alternative on Gila River Indian Community land must consider tribal sovereignty. Tribal sovereignty is based in the inherent authority of Native American tribes to govern themselves. While this notion of sovereignty is manifested in many areas, generally Native American land is held in trust by the United States. Native American communities have the authority to regulate land uses and activities on their lands. States have very limited authority over activities within tribal land (see page 2-1 of the Final Environmental Impact Statement). From a practical standpoint, this means that the Arizona Department of Transportation and Federal Highway Administration do not have the authority to survey tribal land, make land use (including transportation) determinations directly affecting tribal land, or condemn tribal land for public benefit through an eminent domain process.</p>

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33	<p>blasting the mountain, it hurts... It's totally going to change the area and people don't realize that."¹⁵⁰</p> <p>In a 2010 Environmental Assessment for a tower site on South Mountain, the Arizona Department of Game and Fish reported the sacredness of the South Mountain. It stated "the Gila River Indian Community and Salt River Pima-Maricopa Indian Community have passed resolutions declaring the South Mountains to be a sacred place/traditional cultural property because of the prominent role the mountains have in oral traditions and songs of the Akimel O'odham (Pima) and Pee Posh (Maricopa) tribes."¹⁵¹</p> <p>On January 21, 2011, the Ahwatukee Foothills News published, <i>Gila River Tribe: Sacred Sites On South Mountain Top Issue In 202 Debate</i>, which stated "foremost on the mind of Gila River Indian Community members are the sacred sites and shrines on South Mountain that would be destroyed if plans to blast a freeway through the mountain proceed...The No. 1 concern by far is the desecration of that mountain...there are a number of areas of cultural significance that would be compromised. There are a number of cultural sites throughout the entire mountain." ¹⁵²</p> <p>Further, in a 2012 press release, Lori Riddle of GRACE stated: "This project would harm the physical and spiritual integrity of Muhadag Do'ag (South Mountain) and traditional cultural properties associated with the mountain."¹⁵³ "Many of the affected mountains in the South Mountain Range are sacred homelands of the O'odham people."¹⁵⁴ "That is why the people in the Gila River Indian Community voted against having it on our lands and why we oppose the alignment that would cut through the mountain."¹⁵⁵</p> <p>In 2013, in an interview on 91.5 KJZZ, Riddle spoke again stating: "I know people try to diminish that (sacredness of the mountain to the GRIC tribal members), but it's a freedom of religion that we have all rights to, and we feel like they are taking that freedom away from us."¹⁵⁶</p> <p>¹⁵⁰ Doug Murphy Ahwatukee Foothills News, <i>Questions remain on blasting into South Mountain</i>, Nov. 11, 2009 found at http://www.azdot.gov/southmountainfreeway/PDF/20091111_questionsremaininblastingintosouthmountain.pdf.</p> <p>¹⁵¹ EA, Finding of No Significant Impact for South Mountain Tower, found at http://www.ntia.doc.gov/legacy/psic/AZ_1.02f_South%20Mtn_EA%20and%20FONSI%20package_signed.pdf.</p> <p>¹⁵² Ari Cohn, Ahwatukee Foothills News, <i>Gila River Tribe: Sacred Sites on South Mountain Top Issue In 202 Debate</i>, January 21, 2011 found at http://www.azdot.gov/southmountainfreeway/PDF/012111AFN.pdf.</p> <p>¹⁵³ Sierra Club, <i>New Sierra Club Report Identifies How the Nation's Best and Worst Transportation Projects Will Move the US Beyond Oil, or Keep Us Shackled to the Pump: South Mountain Freeway Makes the List of Worst Projects</i>, December 11, 2012 found at http://www.arizona.sierraclub.org/pr_and_alerts/pr_and_alerts_2012/alert_12-11-12.asp (last visited July 10, 2013).</p> <p>¹⁵⁴ <i>Id.</i></p> <p>¹⁵⁵ <i>Id.</i></p> <p>¹⁵⁶ Steve Shadley, <i>South Mountain Freeway proposal gets mixed reviews at a public hearing</i> May 21, 2013 http://www.kjzz.org/content/1305/south-mountain-freeway-proposal-gets-mixed-reviews-public-hearing (last visited July 1, 2013); The Free Exercise Clause of the First Amendment states that Congress shall not pass laws prohibiting the free exercise of religion; GRACE also argues that ADOT's action to desecrate South Mountain is a violation of the United States trust responsibility with the Native Americans based on the fact that no analysis of ADOT's action is made in light of the American Indian Religious Freedom Act ("AIRFA"). The AIRFA of 1978 declares that it is the policy of the United States to protect and preserve for American Indians their inherent right of freedom to believe, express, and exercise the traditional religions of the American Indian, Ekimo, Aleut, and Native Hawaiians, including but not limited to access to sites, use and possession of sacred objects, and the freedom to worship though ceremonials and traditional rites. (Pub. L. No. 95-341 (codified in part at 42 U.S.C. § 1996)). AIRFA provides land managers with the authority to take action to protect sacred lands. (Dean Suagee and Jack Trope, Native Sacred Places Protection Legal workshop, revised 2/11/2008 P. 13). AIRFA requires policies of all governmental agencies to eliminate interference with the free exercise of Native religion, based on the First Amendment, and to accommodate access to and use of religious sites to the extent that the use is practicable and is</p>
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35	Cultural Resources	<p>Since the beginning of the environmental impact statement process, the Federal Highway Administration and Arizona Department of Transportation have been carrying out cultural resources studies and engaging in ongoing, open consultation with the Gila River Indian Community Tribal Historic Preservation Office regarding the identification and evaluation of places of religious and cultural importance to the tribe that may be adversely affected by the proposed freeway. Such places are referred to as traditional cultural properties. As a result of these discussions and of studies conducted by the Gila River Indian Community's Cultural Resource Management Program, the Gila River Indian Community has identified traditional cultural properties that are eligible for listing in the National Register of Historic Places and that could be affected by construction of the proposed freeway. In certain cases, listing these properties on the National Register of Historic Places may offer them protection under Section 4(f) of the Department of Transportation Act. The traditional cultural properties identified are culturally important to other Native American tribes as well. For more discussion of traditional cultural properties, see the section, <i>Cultural Resources</i>, beginning on page 4-140 of the Final Environmental Impact Statement and pages 5-26 through 5-28.</p> <p>Section 106 of the National Historic Preservation Act requires a government-to-government relationship between the Federal Government and Indian tribes as described beginning on page 4-140 of the Final Environmental Impact Statement. Section 106 requires that federal agencies take into account the effects of their undertakings on historic properties. This process requires consultation with tribal authorities. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. The consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Register of Historic Places eligibility recommendations (including traditional cultural properties), project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.</p> <p>The American Indian Religious Freedom Act, 42 United States Code Section 1996, provides a policy statement of the United States to "protect and preserve for American Indians their inherent right of freedom to believe, express, and exercise the traditional religions of the American Indian . . . including but not limited to access to sites, use and possession of sacred objects, and the freedom to worship through ceremonials and traditional rites."</p> <p>The Arizona Department of Transportation and Federal Highway Administration complied with the policy stated in the American Indian Religious Freedom Act throughout the environmental impact statement process, as evidenced by consultation efforts, mitigation measures, and a discussion of cultural resources issues in the Draft Environmental Impact Statement. The study would not violate the American Indian Religious Freedom Act because, as stated above, members of the Gila River Indian Community would not be prohibited from continuing to practice their beliefs even if the project goes forward because access to the mountain would be maintained, impacts would be mitigated based on input by the Gila River Indian Community and others, and only a small fraction of the mountain would be affected.</p>

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36	<p>B. SOUTH MOUNTAIN LOOP 202 DISPARATE CUMULATIVE HEALTH AND ENVIRONMENTAL EFFECTS ON THE GRIC, INCLUDING GRACE COMPLAINANTS</p> <p>With approximately 67,000 cars travelling daily between Phoenix and Tucson on Interstate 10 (one of the three interstate highways that serves as the through-routes for nearly all truck traffic) only a small fraction of those cars are driven by tribal members.¹⁵⁷ However, because approximately 25 miles of Interstate 10, two lanes in each direction, is running through the GRIC, pollution is being created and emitted onto the GRIC.¹⁵⁸ The GRIC assert that this is its single biggest source of air pollution in the community.¹⁵⁹ There are also several million cars owned by people who live, work, and commute within the greater Phoenix area, causing pollution, while car ownership in GRIC is low because GRIC members work and live in the same districts.¹⁶⁰ The GRIC even goes as far to encourage customers to its casinos to use buses from the near-by urban areas on a regular basis to reduce single occupancy car traffic to its Casinos.¹⁶¹ However, even with this proactive approach to the environment, the 2005 Joint Air Toxics Assessment Program (JATAP) report shows that GRIC has high Particulate Matter (“PM”) and Volatile organic compounds (VOC) in its air.¹⁶² The South Mountain Loop 202 would be yet another source of pollution not created by the GRIC but affecting the GRIC.</p> <p>Maricopa County has struggled to meet the National Ambient Air Quality Standards (NAAQS) for particulate matter (PM).¹⁶³ The American Lung Associations’ State of the Air 2013, gave Maricopa County a grade of F for the period between 2009-2011 in High Particle Pollution 24-hr days.¹⁶⁴ It also ranked Phoenix-Mesa-Glendale, AZ 18th in Most Polluted by Year-Round Particle Pollution (Annual PM 2.5) and 21st in Most Polluted by Short Term Particle</p> <hr/> <p>not inconsistent with an agency's essential functions. (Canby, John C. Jr., <i>American Indian Law in a Nutshell</i>, pg. 339, 340 1988 West Publishing Company). The Merriam Webster dictionary defines practicable as “capable of being put into practice or of being done or accomplished: feasible.” (Merriam-Webster, http://www.merriam-webster.com/dictionary/practicable. (last visited June 13, 2013)) Here FDOT and ADOTs essential functions are not compromised by not going through South Mountain. Further, there are practicable and feasible alternatives to going through South Mountain like expanding existing highways and developing the public transit systems.</p> <p>¹⁵⁷ GRIC Response to EPA, <i>Gila River Indian Community Response to EPA’s Nine Factors Requirement for Designation of PM-2.5 Under the National Ambient Air Quality Standards</i>, p. 4 Jan. 4, 2011, found at http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OAR-2010-0163-0016.</p> <p>¹⁵⁸ <i>Id.</i></p> <p>¹⁵⁹ <i>Id.</i></p> <p>¹⁶⁰ <i>Id.</i></p> <p>¹⁶¹ <i>Id.</i></p> <p>¹⁶² Hilary R. Hafner Analysis of Air Toxics Collected As Part of The Joint Air Toxics Assessment Project Dec. 2006 found at http://www.epa.gov/ttnamti1/files/20032004csatam/FinalreportJATAP2005.pdf.</p> <p>¹⁶³ Paul Atkinson, <i>2011 record year for Maricopa County air pollution</i> 91.5 KJZZ, Feb. 24, 2012 http://www.kjzz.org/content/1202/2011-record-year-maricopa-county-air-pollution (last visited July 11, 2013); Phoenix has one of the worst air pollution problems in the nation. Mother Nature Network, <i>7 U.S. cities with the worst air pollution</i>, http://www.mnn.com/health/healthy-spaces/photos/7-us-cities-with-the-worst-air-pollution/phenix (last visited July 11, 2013).</p> <p>¹⁶⁴ American Lung Association, <i>State of the Air 2013</i>, found at http://www.lung.org/associations/states/california/assets/pdfs/sota-2013/sota-2013-full-report.pdf.</p>

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36	Air Quality, Construction	<p>The Final Environmental Impact Statement addresses the history of air quality in the region (see text beginning on page 4-68 of the Final Environmental Impact Statement). The Clean Air Act § 109(b)(1) requires the U.S. Environmental Protection Agency to promulgate primary National Ambient Air Quality Standards at levels that allow an adequate margin of safety to protect the public health. Air quality in the Phoenix metropolitan area has improved over time; Phoenix was redesignated to attainment/maintenance for carbon monoxide in 2005, and the U.S. Environmental Protection Agency recently determined that Phoenix has attained the particulate matter (PM₁₀) standard. These improvements are largely associated with cleaner fuels and lower-emission vehicles along with local controls on fugitive dust. Future emissions would also be reduced by the use of cleaner-burning fuels, technological advances in automotive design (including the greater use of alternative fuel vehicles), reformulated gasoline, gas can standards, stricter enforcement of emission standards during inspections, heavy-duty diesel engine and on-highway diesel sulfur control programs, dust control programs, and others.</p> <p>In May 2012, the Arizona Department of Environmental Quality submitted a revised Maricopa Association of Governments 2012 Five Percent Plan for the region. On July 20, 2012, the U.S. Environmental Protection Agency made an official finding that the Maricopa Association of Governments 2012 Five Percent Plan was administratively complete. This decision ended the sanctions clocks associated with Arizona’s decision to withdraw the Maricopa Association of Governments 2007 Five Percent Plan. On February 6, 2014, the U.S. Environmental Protection Agency published a notice in the <i>Federal Register</i> proposing to approve the Maricopa Association of Governments <i>2012 Five Percent Plan for Attainment of the PM-10 Standard</i> for the Maricopa County Nonattainment Area. In the same notice, the U.S. Environmental Protection Agency stated that it would concur with exceptional event (as a result of haboobs and dust storms) documentation prepared by the Arizona Department of Environmental Quality, which would give the region the 3 years of clean data needed for attainment of the particulate matter (PM₁₀) 24-hour standard. Finally on May 30, 2014, the U.S. Environmental Protection Agency approved the 2012 Five Percent Plan and found the area in attainment of the 24-hour particulate matter (PM₁₀) standard based on monitoring data for the years 2010 to 2012 (see page 4-72 of the Final Environmental Impact Statement for more information).</p> <p>The transportation conformity rule in 40 Code of Federal Regulations § 93.123(c)(5) states that hot-spot analyses are not required to consider construction-related activities that cause temporary increases in emissions. Temporary increases are defined as those that occur only during the construction phase and last 5 years or less at any individual site. Although the duration of the overall construction period of the entire 22- to 24-mile proposed action would be 5 to 6 years according to page 3-60 of the Final Environmental Impact Statement, any particular portion of the Study Area would not see construction lasting for 5 to 6 years. Construction would be phased based on the factors appearing on page 3-59 of the Final Environmental Impact Statement. Any particular area of the project would not be expected to see construction activities beyond an approximate 2-year period; therefore, the construction effects described above would be temporary and would not require additional analysis.</p>

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36	<p>Pollution (24-hour PM 2.5).¹⁶⁵ According to the EPA Green Book, Maricopa County has been in nonattainment in Particulate Matter (PM)-10 since 1992.¹⁶⁶</p> <p>PM-10 is a “complex mixture of extremely small particles and liquid droplets...made up of a number of components, including acids..., organic chemicals, metals, and soil or dust particles.”¹⁶⁷ PM-10 are “inhalable coarse particles,” that can be found near roadways and dusty industries.¹⁶⁸ They can affect the heart and lungs and cause serious health effects.¹⁶⁹ Those most at risk to PM-10 are people with heart or lung disease¹⁷⁰, older adults, children, and physically active people.¹⁷¹ People with diabetes may also be at risk.¹⁷² Further, new studies suggest that exposure to high particle levels may also be associated with low birth weight in infants, pre-term deliveries, and possibly fetal and infant deaths.¹⁷³ Long-term exposures have been associated with problems such as reduced lung function and the development of chronic bronchitis and even premature death.¹⁷⁴ Short-term exposures to particles can aggravate lung disease, causing asthma attacks and acute bronchitis, and may also increase susceptibility to respiratory infections.¹⁷⁵</p> <p>Almost every one of the PM-10 exceedances has been detected at the air quality monitor at 43rd Avenue and Broadway Road. Because the air is already heavily polluted, the placement of a freeway about a mile and a half upwind from this monitor will have a disparate impact on the health and welfare of the GRIC, who are situated next to the proposed site. The GRIC has the highest level of diabetes in the nation; those with diabetes are more susceptible to irritation from PM-10 and more susceptible to other medical conditions.</p> <p>Additionally, during the construction phase, thousands of tons of dirt would be moved around upwind of the 43rd Avenue and Broadway Road monitor causing increased levels of PM. The proposed path of the South Mountain Loop 202 would cause PM over the Salt River bed, where extensive earthmoving will be necessary for the construction of the bridges. Blasting South Mountain would also release enormous amounts of PM, and the natural wind currents and prevailing wind patterns would push this PM toward the air monitor at 43rd Avenue.</p> <p>Because people are contracting Valley Fever (Coccidioidomycosis) in Southern Arizona (especially in the Phoenix and Tucson areas),¹⁷⁶ Valley Fever is a threat. The two species of coccidioides fungi that cause Valley Fever are commonly found in the soil of specific areas, one of which is Arizona’s Sonoran desert, and are stirred into the air by anything that disrupts the soil like construction.¹⁷⁷ Moreover, Native Americans are more susceptible to developing serious</p> <p>¹⁶⁵ <i>Id.</i> at 13-15. ¹⁶⁶ Nonattainment Status for Each County by Year for Arizona As of December 14, 2012 http://www.epa.gov/oaqps001/greenbk/anay_az.html (last visited June 24, 2013). ¹⁶⁷ EPA, Particulate Matter (PM) http://www.epa.gov/airquality/particlepollution/ (last visited 6/24/13). ¹⁶⁸ <i>Id.</i> ¹⁶⁹ <i>Id.</i> ¹⁷⁰ In people with heart disease, short-term exposures have been linked to heart attacks and arrhythmias. ¹⁷¹ Air Now, Particle Pollution and Your Health http://airnow.gov/index.cfm?action=particle_health.page1#2 (last visited June 24, 2013). ¹⁷² <i>Id.</i> ¹⁷³ <i>Id.</i> ¹⁷⁴ <i>Id.</i> ¹⁷⁵ <i>Id.</i> ¹⁷⁶ The University of Arizona, Valley Fever Center for Excellence, https://www.vfce.arizona.edu/ValleyFeverInPeople/WhoGetsIt.aspx (last visited June 24, 2013). ¹⁷⁷ Mayo Clinic, Definition: Valley Fever, http://www.mayoclinic.com/health/valley-fever/DS00695 (last visited July 1, 2013).</p>

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36 (cont.)		<p>Detecting the fungus responsible for valley fever in soils is not practical at this time. However, to reduce the amount of construction dust generated that could carry the fungus, particulate control measures related to construction activities would be followed. The following mitigation measures would be followed, when applicable, in accordance with the most recently accepted version of the Arizona Department of Transportation <i>Standard Specifications for Road and Bridge Construction</i> (2008). Prior to construction and in accordance with Maricopa County Rule 310, Fugitive Dust Ordinance, the contractor shall obtain an approved dust permit from the Maricopa County Air Quality Department for all phases of the proposed action. The permit describes measures to be taken to control and regulate air pollutant emissions during construction (see page 4-173 of the Final Environmental Impact Statement).</p> <p>The air quality assessment for the proposed freeway analyzed impacts from carbon monoxide and particulate matter (PM₁₀) and followed U.S. Environmental Protection Agency guidelines. No violations of either the carbon monoxide or particulate matter (PM₁₀) standards were identified, even at worst-case locations along the project corridor. Thus, the carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones. For mobile source air toxics, the analysis showed that for the Study Area, constructing the freeway would have a marginal effect on annual emissions in 2025 and 2035 (less than a 1 percent difference in total annual emissions between the Preferred Alternative and No-Action Alternative). With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions. The air quality analyses were updated for the Final Environmental Impact Statement, including a quantitative particulate matter (PM₁₀) analysis, and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement.</p> <p>Congestion relief resulting from the proposed freeway would provide localized air quality emissions reductions on area freeways and arterial streets and at interchanges, benefiting users of area highways and those living near congested roads.</p> <p>Summary information about the findings of the Joint Air Toxics Assessment Project study is provided as background information in the Draft and Final Environmental Impact Statements, but the study itself is not relevant to the type of analysis done pursuant to the Federal Highway Administration’s mobile source air toxics guidance, which is an emissions analysis. Monitored ambient concentrations of mobile source air toxics (the focus of the Joint Air Toxics Assessment Project) do not inform this type of analysis. While monitoring data can be useful for defining current conditions in the affected environment (to the extent that the monitoring data are current), they don’t tell us anything about future conditions, or the impacts of the project itself, which is why an emissions analysis was performed. The mobile source air toxic analysis presented beginning on page 4-77 of the Final Environmental Impact Statement is an estimated inventory of mobile source air toxic emissions for the entire Study Area for 2025 and 2035. This approach was used because the inventory estimate accounts for changes in traffic and emissions on all roadways affected by a proposed project, and would, therefore, be a more reliable predictor of changes in exposure to mobile source air toxics.</p>

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37	<p>infection from it than are whites.¹⁷⁸ If the South Mountain Loop 202 is constructed there would be a real risk to the members of the GRIC.</p> <p>The GRIC would also be disparately affected by negative environmental consequences to its agriculture sector. Agriculture plays an important role for the GRIC and is a major sector in GRIC's economic development plan. "15,000 acres of Community farms on the GRIC support a variety of crops such as cotton, wheat, millet, alfalfa, barley, melons, pistachios, olives, citrus, and vegetables. And independent farming operations cultivate an additional 22,000 acres of similar crops, bringing the total agricultural product value to an excess of \$25 million."¹⁷⁹ Now with its newly restored water rights, the GRIC is planning on developing a much larger agricultural industry. However, PM decreases crop production, and because of this, not only will the health of the crops be compromised but the profit from the GRIC's agriculture will be compromised by the air pollution from the South Mountain Loop 202.</p>
38	<p>Maricopa County has also been in nonattainment in 8-Hr ozone 1997 since 2004 and in 8-Hr ozone 2008 since 2012.¹⁸⁰ The American Lung Associations' State of the Air 2013, gave Maricopa County a grade of F for the period between 2009-2011 in High Ozone days¹⁸¹ and 23rd in Most Ozone-Polluted Cities.¹⁸² Ozone is formed when pollutants emitted by cars, power plants, industrial boilers, refineries, chemical plants, and other sources react chemically in the presence of sunlight.¹⁸³ Those most at risk are children, adults who are active outdoors, adults - including older adults- with respiratory diseases, such as asthma, and people with unusual susceptibility to ozone.¹⁸⁴ Ozone can aggravate asthma and inflame and damage the lining of the lungs that can in turn cause long-term health effects and a lower quality of life.¹⁸⁵</p>
39	<p>Higher ozone levels would have a disparate effect on the people of the GRIC. First, many GRIC members have asthma and other respiratory problems. Ozone increases will exacerbate existing problems. Second, because the Hassayampa Freeway CANAMEX route is not first being built, the South Mountain Loop would be used as a bypass for truck drivers traveling from Canada to Mexico. This would also have a major disproportionate effect on the GRIC. With Interstate 10 already running through the GRIC, more diesel trucks near the GRIC would only increase pollution, some of which are cancer-causing.¹⁸⁶ Diesel from trucks can create the same amount of air pollution as 150 passenger cars¹⁸⁷ and diesel exhaust has been</p> <p>¹⁷⁸ Mayo Clinic, Risk Factors: Valley Fever, http://www.mayoclinic.com/health/valley-fever/DS00695/DSECTION=risk-factors (last visited July 1, 2013).</p> <p>¹⁷⁹ Inter Tribal Council of Arizona, Inc., Gila River Indian Community http://itcaonline.com/?page_id=1158 (last visited 7/8/13).</p> <p>¹⁸⁰ EPA, Nonattainment Status for Each County by Year for Arizona As of December 14, 2012 http://www.epa.gov/oaqps001/greenbk/anay_az.html (last visited July 13, 2013); 91.5 KJZZ, Paul Atkinson, <i>2011 record year for Maricopa County air pollution</i>, Feb. 24, 2012 http://www.kjzz.org/content/1202/2011-record-year-maricopa-county-air-pollution (last visited July 13, 2013); Phoenix has one of the worst air pollution problems in the nation. Mother Nature Network, <i>7 U.S. cities with the worst air pollution</i>, http://www.mnn.com/health/healthy-spaces/photos/7-us-cities-with-the-worst-air-pollution/phoenix (last visited July 13, 2013).</p> <p>¹⁸¹ American Lung Association, State of the Air 2013 found at http://www.lung.org/associations/states/california/assets/pdfs/sota-2013/sota-2013-full-report.pdf.</p> <p>¹⁸² <i>Id.</i> at 13-15.</p> <p>¹⁸³ AirNow, Smog - Who does it hurt? http://airnow.gov/index.cfm?action=smog.page1 (last visited 6/27/13).</p> <p>¹⁸⁴ <i>Id.</i></p> <p>¹⁸⁵ <i>Id.</i></p> <p>¹⁸⁶ Cancer-causing pollutants from trucks are diesel particulate matter and Volatile Organic Compounds (VOCs) such as benzene, formaldehyde, and polycyclic aromatic hydrocarbons (PAHs). (Sierra Club, Highway Health Hazards, http://www.sierraclub.org/sprawl/report04_highwayhealth/report.pdf (last visited 6/29/13)).</p> <p>¹⁸⁷ MECA, <i>Clean Air Facts Emission Controls for Diesel Engines</i> http://www.meca.org/ (last visited 7/2/13).</p>

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37	Air Quality, Agriculture	<p>As noted on page 4-68 of the Final Environmental Impact Statement, secondary standards are established for criteria pollutants to minimize environmental and property damage. Primary and secondary standards for particulate matter (PM₁₀) are identical; no threshold is established by the U.S. Environmental Protection Agency for carbon monoxide (CO).</p> <p>The air quality assessment for the proposed freeway revealed no violations of either the carbon monoxide or particulate matter (PM₁₀), even at worst-case locations along the project corridor. Thus, the carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones.</p> <p>Because the secondary standards for particulate matter (PM₁₀) are identical, the proposed project would also not cause a violation of the secondary particulate matter (PM₁₀) standard. Further, the construction and operation of the proposed freeway would not alter agricultural operations on the Gila River Indian Community.</p>
38	Air Quality	<p>As noted on page 4-76 of the Final Environmental Impact Statement, since ozone is a regional pollutant, there is no requirement to analyze potential impacts and no possibility of localized violations of ozone to occur at the project level. The Maricopa Association of Governments is responsible for developing plans to reduce emissions of ozone precursors in the Maricopa area. The Preferred Alternative is included in the <i>Regional Transportation Plan</i> that has been determined by the U.S. Department of Transportation to conform to the State Implementation Plan on February 12, 2014.</p>
39	Trucks	<p>Creating a truck bypass is not a goal of the proposed action. The proposed freeway is part of a transportation system developed to improve mobility in the region by increasing capacity and allowing traffic—including truck traffic—to access a segment of the “loop” system (see pages 1-21, 1-22, 3-1, and 3-3 of the Final Environmental Impact Statement) in the Phoenix metropolitan area. The proposed South Mountain Freeway would be a commuter corridor, helping to move local traffic. As with all other freeways in the region, trucks would use it for the through-transport of freight, for transport to and from distribution centers, and for transport to support local commerce. Nevertheless, the primary vehicles using the proposed freeway would be automobiles. The Maricopa Association of Governments regional travel demand model projects that truck traffic would represent approximately 10 percent of the total traffic on the proposed freeway, similar to what is currently experienced on other regional freeways such as Interstate 10, State Route 101L, and U.S. Route 60. As disclosed in the Final Environmental Impact Statement, it is expected that “true” through-truck traffic (not having to stop in the metropolitan area) would continue to use the faster, designated, and posted bypass system of Interstate 8 and State Route 85 (see page 3-64 of the Final Environmental Impact Statement).</p> <p>The air quality analyses included projected truck traffic. The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones. For mobile source air toxics, the analysis showed that for the Study Area, constructing the freeway would have a marginal effect on annual emissions in 2025 and 2035 (less than a 1 percent difference in total annual emissions between the Preferred Alternative and No-Action Alternative). With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more</p>

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	<p>linked to lung cancer and the development of asthma.¹⁸⁸ Moreover, although the United States has implemented national heavy-duty diesel emissions standards and Ultra-low-sulfur diesel (“ULSD”) fuel requirements, Mexico has not made significant progress in implementing its heavy-duty diesel emissions standards nor has it transitioned to ULSD.¹⁸⁹ And, although the Arizona Department of Air Quality monitors 1967 through 2008 diesel powered vehicles in the metro Phoenix (Area A) and Tucson (Area B), commercial vehicles that are licensed in multiple states are not.¹⁹⁰ Further, some trucks using the South Mountain Loop 2002 will be carrying hazardous material causing major risks to the GRIC. Although the DEIS admits that the South Mountain Loop 202 will be used to transport hazardous waste, it does not include an emergency plan for the different communities that could be affected by accidents by transporters of hazardous waste.</p> <p>There is also a risk of a pollution hot spot developing in the GRIC because of the leveling of mountain ridges and the placement of a highway with speeding cars and trucks on the flattened area abutting the GRIC. The GRIC reservation is situated between the Sierra Estrella to the west running north and south along the entire distance of the GRIC on the western edge, the South Mountain to its north separating the GRIC from Phoenix and Tempe, and the Santan Mountains on the northeast side, separating the GRIC from Gilbert and Apache Junction.¹⁹¹ “These natural barriers are large enough and have sufficient altitude to prevent pollution from transporting onto GRIC even during periods of inversions and stagnant air.”¹⁹² The South Mountain Loop will eliminate the natural barrier of the South Mountain separating the GRIC from the heavily polluting cities of Phoenix and Tempe. Further, the new car and truck emissions will be emitted near the GRIC. Under certain wind and weather patterns, these emissions will be captured and contained within the remaining ranges on the GRIC causing a hotspot. Like past off-reservation polluting activities, the GRIC will have to bear the consequences of pollution not created by them but migrating to its lands.</p> <p>The GRIC also would be disproportionality affected by other public health concerns, concerns of which were not mentioned in the DEIS. The GRIC struggle with substance abuse, such as alcoholism and methamphetamine addiction, and have been struggling with a high suicide rate.¹⁹³ American Indian and Alaska Native (AI/AN) people are significantly more likely to report past-year alcohol and substance use disorders than any other race.¹⁹⁴ And suicide rates for AI/AN people are 1.7 times higher than the U.S. all-races rate.¹⁹⁵ Further, several sources</p> <p>¹⁸⁸ EPA, <i>Health Assessment Document for Diesel Engine Exhaust</i> (Final 2002) found at http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=29060#Download.</p> <p>¹⁸⁹ EPA, Thirteenth Report of the Good Neighbor Environmental Board to the President and Congress of the United States, p. 15 found at http://www.epa.gov/oaqmo/gnebgnebl3threport/English-GNEB-13th-Report.pdf.</p> <p>¹⁹⁰ Arizona Department of Air Quality, Air Quality Division: Vehicle Emissions: Diesel Vehicles, http://www.azdeq.gov/air/vei/diesel.html (last visited 7/2/13).</p> <p>¹⁹¹ GRIC Response to EPA, Gila River Indian Community Response to EPA’s Nine Factors Requirement for Designation of PM-2.5 Under the National Ambient Air Quality Standards, p. 5 Jan. 4, 2011, found at http://www.regulations.gov/#/documentDetail;D=EPA-HQ-OAR-2010-0163-0016.</p> <p>¹⁹² <i>Id.</i></p> <p>¹⁹³ National Indian Health Board, <i>The Gila River Indian Community’s Equine Programs</i>, http://www.nihb.org/behavioral_health/mspi_program_gila_river.php (last visited July 1, 2013).</p> <p>¹⁹⁴ Substance Abuse and Mental Health Services Administration Office of Applied Studies, The NSDUH Report (2007) found at http://www.oas.samhsa.gov/2k7/AmIndians/AmIndians.htm.</p> <p>¹⁹⁵ Indian Health Service Office of Public Health Support, Trends in Indian Health, 2002-2003; Historical trauma is linked to increased suicide risk not only through depression, despair, and helplessness felt because of cultural oppression, but also because anger, aggression, and violence felt in response to experiences of victimization can be</p>
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39 (cont.)		<p>than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions. Because Mexican trucks are currently restricted to the border region, they are not operating in the project Study Area and they were not included in the air quality analyses.</p> <p>Arizona highways, as are most highways across the United States, are open to all kinds of traffic, so long as the cargo being carried is in accordance with U.S. Department of Transportation regulations for the specific type of cargo. The Arizona Department of Transportation has a few locations in the state with hazardous cargo restrictions, but these restrictions are based on specific or unique emergency response issues or roadway design limitations specific to that location. For example, the Interstate 10 Deck Park Tunnel has certain hazardous cargo transport restrictions because of the limited ability for emergency responders to address a hazardous materials incident in the tunnel. The South Mountain Freeway, if implemented, is expected to operate under the same rules as other similar facilities in the state; transport of hazardous cargo would be expected to be permissible (see text box on page 4-166 of the Final Environmental Impact Statement).</p> <p>The Arizona Department of Public Safety (which includes the State Highway Patrol) has primary responsibility for enforcing traffic laws. The Arizona Department of Public Safety also has primacy when calling in support for traffic accidents, including hazardous materials accidents (see text box on page 4-166 of the Final Environmental Impact Statement). The Arizona Department of Transportation maintains a list of contractors who provide emergency response services, as well as local municipalities whose fire and police departments operate in cooperation with the Arizona Department of Public Safety on incidents within their jurisdiction. Requirements for shippers are maintained by the Arizona Department of Transportation’s Enforcement Compliance Division.</p> <p>In the event of an incident with a hazardous materials issue on a State or federal highway, the emergency responders contact the Arizona Department of Transportation’s Traffic Operations Center to report the incident. The Traffic Operations Center then contacts the Arizona Department of Transportation’s Safety and Risk Management group, which responds to the accident scene and assesses needs in concert with the Incident Commander from the responding agency with jurisdiction. If requested, the Arizona Department of Transportation can assist cleanup activities by engaging specialty subcontractors with whom the Arizona Department of Environmental Quality has contracts for such support. The Arizona Department of Transportation’s Safety and Risk Management group’s charge is primarily public health protection, with cleanup support being secondary.</p>
40	Air Quality	<p>Air quality depends on several factors such as the area itself (size and topography), the prevailing weather patterns (meteorology and climate) and the pollutants released into the air. Cuts through the South Mountains would be expected to produce microclimate differences similar to those produced by a series of buildings in a large city which produce localized wind tunnel effects. The mountain cuts, however, would not affect regional air quality.</p> <p>Hourly meteorological data used for the dispersion modeling with CAL3QHCR were downloaded from the U.S. Environmental Protection Agency’s Support Center for Regulatory Atmospheric Modeling for the Phoenix Sky Harbor International Airport (surface data) and the Tucson International Airport (upper air data) for the 5-year period from 1987 through 1991 (epa.gov/ttn/scram/metobsdata_databases.htm). The 5 years of surface and mixing height data were processed with PCRAMMET to develop meteorological input files compatible with CAL3QHCR and incorporated into the particulate matter (PM₁₀) and carbon monoxide model runs at the</p>

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41	<p>indicate that AI/ANs are at higher risk for certain mental health disorders than other racial/ethnic groups.¹⁹⁶ The Office of Minority Health reports that AI/ANs experience higher rates than all races in the following areas: serious psychological distress; feelings of sadness, hopelessness, and worthlessness; feelings of nervousness or restlessness; and suicide.¹⁹⁷</p> <p>The Indian Health Service, the Federal Health Program for American Indians and Alaska Natives, recognizes that one major reason for these higher national rates of substance abuse and psychological problems is historical trauma.¹⁹⁸ Historical trauma describes the cumulative effects of the massive group trauma experienced by AI/AN peoples and nations since the arrival of European settlers on the American continent.¹⁹⁹ This trauma has taken various forms, from outright violence of wars and forced relocation to damaging prohibitions on Native languages and cultural and religious practices. Historical trauma has many dimensions, but one important aspect is that, as with any trauma situation, parents and caregivers who have been traumatized often pass on trauma response patterns to their children.²⁰⁰ This means that the effects of historical trauma in AI/AN communities include not just past or present acts of oppression and racism that AI/AN people have been victimized by, but also the ways that trauma response behaviors are internalized, repeated, and passed on within AI/AN families and communities.²⁰¹</p> <p>The people of the GRIC, like many other Native Americans in the US, have continued to socially and psychologically struggle to heal from losing traditional ways of life, homeland, language, traditions, etc. due to intrusions on their culture. Because cultural identity and psychological health are related, healing is thwarted by continued marginalization of their culture and worldview. ADOT, deliberately destroying more culture unnecessarily is discriminatory and irresponsible. It is discriminatory because the act destroys an integral part of the GRIC's identity while history shows that Native Americans and the people of the GRIC have lost an incredible amount of their culture already. The GRIC in particular have been embattled in a water right dispute for decades. The loss of water has changed its way of life in very significant ways like food production, diet, independence, etc. And only just recently are the GRIC's water rights being restored after having had to struggle for almost a century with severely reduced water flows. Moreover, ADOT's action is discriminatory because modern psychology shows that cultural identity and environment play a major role in human health, especially for Native Americans who have a unique relationship with their culture and the natural environment.</p> <p>Not only will a sacred mountain be desecrated but access to historical, ancestral land will be more limited, less accessible, and will be disturbed by noise, cars, and pollution. The landscape will be more fragmented and urbanized, qualities not compatible with sacredness. Modern psychology is not the only messenger to ADOT: the GRIC's 2007 Community Council resolution stated that they "strongly oppose(d) any alteration of the South Mountain Range for</p> <hr/> <p>turned against oneself. (Subia BigFoot, D., <i>History of Victimization in Native Communities</i>, found at http://icctc.org/History%20of%20Victimization%20Issues-%20Final.pdf).</p> <p>¹⁹⁶ Olson, L. & Wahab, S., American Indians and Suicide: A Neglected Area of Research. Trauma, Violence, and Abuse, 2006 7(1), 19-33.</p> <p>¹⁹⁷ US Department of Health and Human Services Office of Minority Health, <i>Mental Health and American Indians and Alaska Natives</i>, found at http://minorityhealth.hhs.gov/templates/content.aspx?ID=6475.</p> <p>¹⁹⁸ U.S. Department of Health and Human Services, <i>American Indian /Alaska Native Behavioral health Briefing Book</i>, August 2011, found at http://www.ihs.gov/behavioral/documents/AIANBHBriefingBook.pdf.</p> <p>¹⁹⁹ Brave Heart, M. Y. H. and DeBruyn, L. M., The American Indian Holocaust: Healing Historical Unresolved Grief, <i>American Indian and Alaska Native Mental Health Research</i>, 1998 8(2), 61.</p> <p>²⁰⁰ U.S. Department of Health and Human Services, <i>American Indian /Alaska Native Behavioral health Briefing Book</i>, August 2011, found at http://www.ihs.gov/behavioral/documents/AIANBHBriefingBook.pdf.</p> <p>²⁰¹ <i>Id.</i></p>
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40 (cont.)		<p>three analysis locations described above. The use of Phoenix Sky Harbor International Airport meteorological data is consistent with the Maricopa Association of Government's regional conformity analysis, which was approved by the U.S. Department of Transportation on February 12, 2014, and with the Arizona Department of Environmental Quality's air quality permitting efforts in the region. In addition, the use of these data was agreed to during interagency consultation for the proposed project. The selected 5-year data set is representative of the project area and encompasses the wide variety of weather conditions that are likely to be experienced in the project area.</p> <p>With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions.</p>
41	Title VI, Cumulative, Social Conditions	<p>The comment indicates that these impacts have been experienced by the Native American and by the Gila River Indian Community in particular. This comment indicates that these conditions currently exist; therefore, the current state of the public health of the Gila River Indian Community is the baseline condition under consideration. It is not the obligation of the proposed action to mitigate impacts caused by other unrelated actions.</p> <p>Text beginning on page 4-179 of the Final Environmental Impact Statement addresses the proposed freeway's contribution to cumulative impacts. The comment infers the proposed freeway along with future actions would continue to contribute to the struggles referenced in the comment. The suggested cause is a loss of a traditional way of life and a marginalization of related traditions, inferred primarily by loss of natural lands and loss of access to those lands.</p> <p>The Draft and Final Environmental Impact Statements disclose recognition that some populations with environmental justice characteristics have specific needs associated with their identity being tied directly to geographic setting. Text on page 4-187 of the Final Environmental Impact Statement discloses that for the Gila River Indian Community, association with the South Mountains is important to identity and is established through direct spiritual and visual access to the mountains. Land developments in the area have encroached on the South Mountains, and the proposed action would contribute to encroachment on the southern side of the mountains but would be offset by mitigation measures highlighted in text in the section, <i>Cultural Resources</i>, beginning on page 4-140 and in Chapter 5 of the Final Environmental Impact Statement. The contribution of the proposed action to this cumulative effect would be negligible when considering land development patterns encroaching on the resource.</p> <p>The Final Environmental Impact Statement, after consultation and coordination efforts, accommodates and preserves (to the fullest extent possible from the available alternatives) access to the South Mountains for religious practices. A very small portion of the mountain would be affected by the proposed freeway (less than 0.03 percent of the total area). Although the Final Environmental Impact Statement describes the impact on the South Mountains as adverse, Native Americans would not be kept from practicing their beliefs, access to the mountain would be maintained, and mitigation measures would be implemented based on input from members of the Gila River Indian Community.</p>
42	Title VI	<p>The cultural and religious places of importance, like the South Mountains, are acknowledged in the Draft Environmental Impact Statement in several locations, notably pages 4-132 and 5-26. The proposed project would accommodate and preserve (to the fullest extent possible from the available alternatives) access to the South Mountains for religious practices.</p>

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43	<p>indicate that AI/ANs are at higher risk for certain mental health disorders than other racial/ethnic groups.¹⁹⁶ The Office of Minority Health reports that AI/ANs experience higher rates than all races in the following areas: serious psychological distress; feelings of sadness, hopelessness, and worthlessness; feelings of nervousness or restlessness; and suicide.¹⁹⁷</p> <p>The Indian Health Service, the Federal Health Program for American Indians and Alaska Natives, recognizes that one major reason for these higher national rates of substance abuse and psychological problems is historical trauma.¹⁹⁸ Historical trauma describes the cumulative effects of the massive group trauma experienced by AI/AN peoples and nations since the arrival of European settlers on the American continent.¹⁹⁹ This trauma has taken various forms, from outright violence of wars and forced relocation to damaging prohibitions on Native languages and cultural and religious practices. Historical trauma has many dimensions, but one important aspect is that, as with any trauma situation, parents and caregivers who have been traumatized often pass on trauma response patterns to their children.²⁰⁰ This means that the effects of historical trauma in AI/AN communities include not just past or present acts of oppression and racism that AI/AN people have been victimized by, but also the ways that trauma response behaviors are internalized, repeated, and passed on within AI/AN families and communities.²⁰¹</p> <p>The people of the GRIC, like many other Native Americans in the US, have continued to socially and psychologically struggle to heal from losing traditional ways of life, homeland, language, traditions, etc. due to intrusions on their culture. Because cultural identity and psychological health are related, healing is thwarted by continued marginalization of their culture and worldview. ADOT, deliberately destroying more culture unnecessarily is discriminatory and irresponsible. It is discriminatory because the act destroys an integral part of the GRIC's identity while history shows that Native Americans and the people of the GRIC have lost an incredible amount of their culture already. The GRIC in particular have been embattled in a water right dispute for decades. The loss of water has changed its way of life in very significant ways like food production, diet, independence, etc. And only just recently are the GRIC's water rights being restored after having had to struggle for almost a century with severely reduced water flows. Moreover, ADOT's action is discriminatory because modern psychology shows that cultural identity and environment play a major role in human health, especially for Native Americans who have a unique relationship with their culture and the natural environment.</p> <p>Not only will a sacred mountain be desecrated but access to historical, ancestral land will be more limited, less accessible, and will be disturbed by noise, cars, and pollution. The landscape will be more fragmented and urbanized, qualities not compatible with sacredness. Modern psychology is not the only messenger to ADOT: the GRIC's 2007 Community Council resolution stated that they "strongly oppose(d) any alteration of the South Mountain Range for</p> <p>turned against oneself. (Subia BigFoot, D., <i>History of Victimization in Native Communities</i>, found at http://icctc.org/History%20of%20Victimization%20Issues-%20Final.pdf).</p> <p>¹⁹⁶ Olson, L. & Wahab, S., American Indians and Suicide: A Neglected Area of Research. <i>Trauma, Violence, and Abuse</i>, 2006 7(1), 19-33.</p> <p>¹⁹⁷ US Department of Health and Human Services Office of Minority Health, <i>Mental Health and American Indians and Alaska Natives</i>, found at http://minorityhealth.hhs.gov/templates/content.aspx?ID=6475.</p> <p>¹⁹⁸ U.S. Department of Health and Human Services, <i>American Indian /Alaska Native Behavioral health Briefing Book</i>, August 2011, found at http://www.ihs.gov/behavioral/documents/AIANBHBriefingBook.pdf.</p> <p>¹⁹⁹ Brave Heart, M. Y. H. and DeBruyn, L. M., The American Indian Holocaust: Healing Historical Unresolved Grief, <i>American Indian and Alaska Native Mental Health Research</i>, 1998 8(2), 61.</p> <p>²⁰⁰ U.S. Department of Health and Human Services, <i>American Indian /Alaska Native Behavioral health Briefing Book</i>, August 2011, found at http://www.ihs.gov/behavioral/documents/AIANBHBriefingBook.pdf.</p> <p>²⁰¹ <i>Id.</i></p>

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42 (cont.)		<p>The section entitled <i>Title VI and Environmental Justice</i>, beginning on page 4-29 in the Draft Environmental Impact Statement, presents acceptable methods, data, and assumptions to assess the potential for disproportionately high and adverse effects from the proposed action on environmental justice populations and disparate impacts to populations protected under Title VI. Based upon the content of the section, no such effects would result from the action alternatives.</p> <p>In light of comments received on the Draft Environmental Impact Statement, the above-referenced conclusions were confirmed in the preparation of the Final Environmental Impact Statement. To provide further clarity, the discussions of environmental justice and Title VI were separated and additional text explaining the relationship of environmental justice and Title VI to various environmental elements was added throughout Chapter 4, <i>Affected Environment, Environmental Consequences, and Mitigation</i>, as exemplified by the inserted text on page 4-29 of the Final Environmental Impact Statement.</p>
43	Title VI, Cultural Resources	<p>The section entitled <i>Title VI and Environmental Justice</i>, beginning on page 4-29 in the Draft Environmental Impact Statement, presents acceptable methods, data, and assumptions to assess the potential for disproportionately high and adverse effects from the proposed action on environmental justice populations and disparate impacts to populations protected under Title VI. Based upon the content of the section, no such effects would result from the action alternatives.</p> <p>In light of comments received on the Draft Environmental Impact Statement, the above-referenced conclusions were confirmed in the preparation of the Final Environmental Impact Statement. To provide further clarity, the discussions of environmental justice and Title VI were separated and additional text explaining the relationship of environmental justice and Title VI to various environmental elements was added throughout Chapter 4, <i>Affected Environment, Environmental Consequences, and Mitigation</i>, as exemplified by the inserted text on page 4-29 of the Final Environmental Impact Statement.</p> <p>Since the beginning of the environmental impact statement process, the Federal Highway Administration and Arizona Department of Transportation have been carrying out cultural resources studies and engaging in ongoing, open consultation with the Gila River Indian Community Tribal Historic Preservation Office regarding the identification and evaluation of places of religious and cultural importance to the tribe that may be adversely affected by the proposed freeway. Such places are referred to as traditional cultural properties. As a result of these discussions and of studies conducted by the Gila River Indian Community's Cultural Resource Management Program, the Gila River Indian Community has identified traditional cultural properties that are eligible for listing in the National Register of Historic Places and that could be affected by construction of the proposed South Mountain Freeway. The traditional cultural properties identified are culturally important to other Native American tribes as well. For more discussion of traditional cultural properties, see the section, <i>Cultural Resources</i>, beginning on page 4-140 of the Final Environmental Impact Statement and pages 5-26 through 5-28.</p> <p>Section 106 of the National Historic Preservation Act requires a government-to-government relationship between the Federal Government and Indian tribes as described beginning on page 4-140 of the Final Environmental Impact Statement. Section 106 requires that federal agencies take into account the effects of their undertakings on historic properties. This process requires consultation with tribal authorities. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource</p>

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43 (cont.)		<p>Management Program, many different tribal authorities, and the State Historic Preservation Office. The consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Register of Historic Places eligibility recommendations (including traditional cultural properties), project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.</p> <p>The Draft Environmental Impact Statement, after consultation and coordination efforts, accommodates and preserves (to the fullest extent possible from the available alternatives) access to the South Mountains for religious practices. A very small portion of the mountain would be impacted by the proposed freeway (less than 0.03 percent of the total area). Although the Draft Environmental Impact Statement describes the impact on the South Mountains as adverse, Native Americans would not be kept from practicing their beliefs, access to the mountain would be maintained, and mitigation measures would be implemented based on input from members of the Gila River Indian Community.</p> <p>The Arizona Department of Transportation and Federal Highway Administration provided equal access to the public participation process to the Gila River Indian Community and its members. The Arizona Department of Transportation and Federal Highway Administration solicited input from the Gila River Indian Community and other Native American tribes and tribal members and fully considered input and comments that were received.</p> <p>Chapter 2 of the Final Environmental Impact Statement is dedicated to the explanation of the Gila River Indian Community outreach undertaken for the project. Chapter 6 of the Final Environmental Impact Statement further describes Gila River Indian Community outreach throughout the process. The Gila River Indian Community was provided equal opportunities to participate in the project as all other populations and agencies. This outreach was undertaken, in part, to ensure all populations had equal access to the process and, in part, to ensure disparate nor disproportionately high adverse impacts would result from the construction and operation of the proposed action.</p>

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	<p>any purpose”...and any alteration...“would be a violation of the cultural and religious beliefs of the Gila River Indian Community and would have a negative cumulative effect on the continuing lifeways of the people of the Gila River Indian Community.”²⁰² ADOT’s decision is irresponsible because the government is sponsoring a program that significantly reduces Native American culture and identity while at the same time knowing the integral relationship the GRIC has with the South Mountain and possessing all the tools to recognize that Title VI of the Civil Rights Act is being violated.</p> <p>C. ADOT DISCRIMINATED BY NOT CONDUCTING ADEQUATE CONSULTATION TO PREVENT A DISPARATE IMPACT AND BY PROVIDING INADEQUATE NOTICE, ACCESS, AND PUBLIC PARTICIPATION OPPORTUNITIES FOR GRIC AND GRACE TRIBAL MEMBERS</p> <p>GRIC tribal members are speaking out strongly because GRIC feel that they have not been properly included, consulted, and heard. In analyzing ADOT’s procedure and process before and after the release of the DEIS, it is apparent that ADOT did not comply with Title VI’s requirement that no person may be excluded from participation in, denied the benefit of, or subjected to discrimination under any program or activity receiving Federal financial assistance on the basis of race, color, or national origin.²⁰³ It is also apparent that ADOT did not comply with NEPA’s provision to provide for “all Americans safe, healthful, productive, and esthetically pleasing surroundings”, or to take a “systematic, interdisciplinary approach” to aid in considering environmental and community factors in decision making.²⁰⁴</p> <p>Ignoring the fact that GRIC, as a Native American peoples with community centered values and a strong sense of responsibility to protect the integrity of the past, present, and future generations, ADOT has embraced MAG’s interpretation that the South Mountain Loop 202 is an absolute necessary component of the MAG master-plan. MAG’s subcommittee, the Transportation Policy Council (TPC), which plans for and sets aside money for transportation projects in the Maricopa County region and provides the overall plan for all modes of transportation in Maricopa County, is heavily filled with business leaders and corporate executives, who have a bias toward seeing the South Mountain constructed. The GRIC however must make decisions that protect their culturally rich ancestral lands and the health and welfare of present and future generations of GRIC.²⁰⁵ The TCP includes executives from trucking companies (Swift, Knight), shopping mall owners and operators (Macerich), several realty companies, casino architects (The Killian Companies), and a construction firm that builds freeways (FNF Construction).²⁰⁶ ADOT, who is captive to MAG’s belief that the project is necessary, has designed the DEIS so as to create the impression that the South Mountain Loop 202 must be built and no other alternatives are prudent or feasible, downplaying and ignoring the disparate impacts that would result if the South Mountain Loop 202 were constructed.</p> <p>²⁰² Gila River Indian Community Resolution NO. GR-41-07, A Resolution Designating the South Mountain Range (Muhadag, Avikwaxos) as a Sacred Place and Traditional Cultural Property of the Gila River Indian Community. ²⁰³ 42 U.S.C § 2000d. ²⁰⁴ Pub. L. 91-190, 42 U.S.C. 4321-4347, January 1, 1970, as amended by Pub. L. 94-52, July 3, 1975, Pub. L. 94-83, August 9, 1975, and Pub. L. 97-258, § 4(b), Sept. 13, 1982. ²⁰⁵ MAG, TCP http://www.azmag.gov/Committees/Committee.asp?CMSID=1041 (last visited July 15, 2013). ²⁰⁶ <i>Id.</i></p>
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44	Title VI	<p>The Arizona Department of Transportation and Federal Highway Administration provided equal access to the public participation process to the Gila River Indian Community and its members. The Arizona Department of Transportation and Federal Highway Administration solicited input from the Gila River Indian Community and other Native American tribes and tribal members and considered fully the substantive input and comments that were received. Chapter 2 of the Final Environmental Impact Statement is dedicated to the explanation of the Gila River Indian Community outreach undertaken for the project. The Gila River Indian Community was provided the same opportunities to participate in the project as all other populations and agencies. Consultation related to cultural resources followed the requirements of Section 106 of the National Historic Preservation Act.</p> <p>Project communication with Gila River Indian Community officials followed a protocol established for this study, from years of previous consultation and coordination recognizing the sovereign nation status of the Gila River Indian Community and with respect for the Gila River Indian Community’s cultural norms (see letter on page A152 of Appendix 1-1). Consultation and coordination occurred one-on-one with the appropriate Gila River Indian Community officials. Representatives from the Gila River Indian Community participated for years in the South Mountain Citizens Advisory Team. During the public comment period, Community members were provided the same opportunities to attend the public hearing and participate in a public forum as all other populations.</p> <p>The Arizona Department of Transportation and Federal Highway Administration did comply with the National Environmental Policy Act’s provision to provide for “all Americans safe, healthful, productive, and esthetically pleasing surroundings”, or to take a “systematic, interdisciplinary approach” to aid in considering environment and community factors in decision making. The alternatives development and screening process outlined in Chapter 3 of the Final Environmental Impact Statement is one example of the agencies’ arduous, exhaustive, and comprehensive systematic and interdisciplinary approach to the National Environmental Policy Act. Further, as shown in Figure 3-41 on page 3-67, the process of identifying a preferred alternative demonstrates the interdisciplinary accounting in decision making in the process.</p>
45	Purpose and Need	<p>The Transportation Policy Committee was established by the Maricopa Association of Governments Regional Council in 2002 to oversee the development of the 20-year <i>Regional Transportation Plan</i> and to guide transportation planning in the region. The Transportation Policy Committee is made up of 23 members. The membership includes 13 city representatives, a Maricopa County Supervisor, an Arizona Department of Transportation State Transportation Board member, and seven business representatives. The final member, representing Native American Indian Communities is the Gila River Indian Community Lieutenant Governor. So the Gila River Indian Community has a direct voice in the direction of transportation funding in the region.</p> <p>The proposed project is part of the <i>Regional Transportation Plan</i> for the Maricopa Association of Governments region. In 2004, the voters of Maricopa County approved the <i>Regional Transportation Plan</i> and the extension of a half-cent sales tax to fund its projects. The role of the Arizona Department of Transportation is to implement the freeway program from the voter-approved plan.</p>

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46	<p>ADOT has minimally consulted with the GRIC in the scoping and preparing of the DEIS both officially and unofficially. While ADOT indicates that it has conducted 178 meetings with GRIC on its South Mountain Loop 202 proposal between 2001 to 2012, only three, all in 2011, were identified as cultural resource consultation meetings and none were attended by the BIA.²⁰⁷ Further, these cultural resource consultation meetings were designated as “Meetings Focused on the Proposed On-Community Alignment, 2010-2012 biasing any efforts to satisfy the goals of a cultural resource consultation meeting. The National Park Services’ guidance for federal historic preservation programs states: “consultation means the process of seeking, discussing, and considering the views of others, and, where feasible, seeking agreement with them on how historic properties should be identified, considered, and managed. Consultation is built upon the exchange of ideas, not simply providing information.”²⁰⁸ Further, consultation should start early for a proposed project, not 9 years after conducting meetings. And those best equipped to communicate the tribes’ sensitivities to cultural places should be consulted with and not just met with so as to satisfy what it believes is its Title VI and EJ requirements.²⁰⁹</p> <p>ADOT spent the first 9 years just informing GRIC representatives what its plan were and trying to “coordinate” its agenda -not consulting: ADOT worked mainly with the Natural Resources Standing Committee (NRSC) and the Transportation Technical Team (TTT). The NRSC is a special committee reporting to the Community Council that reviews all land use actions under its jurisdiction, acts as a key decision-making agent in actions pertaining to land use effects on Community land, and issues right-of-entry permits for non-Community members wishing to conduct a survey or other data collection tasks on Community land.” And the TTT is a special committee established by the Community Council...to facilitate informed decisions on transportation requests.²¹⁰ These two committees do not participate in consultation, which is something very different from making land use decisions, issuing right-of-entry permits for non-Community members, and facilitating informed decisions on transportation requests.</p> <p>Moreover, ADOT didn’t conduct the informational scoping meetings itself. The DEIS states that in August 2010 while ADOT believed it still could secure an on-reservation alignment, it presented an environmental and engineering overview outlining the freeway and its</p> <p>²⁰⁷ None of these meetings was the one that the Four Southern Tribes of Arizona attended. (ADOT, South Mountain Study Team, Chapter 2 <i>Gila River Indian Community Coordination</i> at 4-7); The federal government is obligated by its “trust responsibility” to represent the best interests of tribes and their members. This specific responsibility is delegated to the U.S. Bureau of Indian Affairs (BIA).” (<i>Id.</i> at 2); Under Executive Order 13,175, each federal agency must establish a process for consultation with tribal officials in the development and implementation of “policies that have tribal implications” based upon the “unique legal relationship” between the United States and “Indian tribal governments as set forth in the Constitution of the United States, treaties, statutes, Executive Orders, and court decisions.” (65 FED. REG. 67249 (Nov. 6, 2000) https://www.federalregister.gov/articles/2000/11/09/00-29003/consultation-and-coordination-with-indian-tribal (last visited July 15, 2013)). With the BIA as one of ADOT’s partners, any ADOT action with the South Mountain Freeway is dependent on it complying with Executive Order 13,175.</p> <p>²⁰⁸ National Park Service, The Secretary of the Interior’s Standards and Guidelines for Federal Agency Historic Preservation Programs pursuant to the National Historic Preservation Act, 63 FED. REG. 20496, 20504 (Apr. 24, 1998).</p> <p>²⁰⁹ While the Elderly Concerns Group was met with twice, in 2001 and in then in 2002 by ADOT, nothing came of it. Because their concerns did not influence the DEIS, the Group on June 12, 2013 had to make a formal motion that the Elderly Concerns Group was opposed to the South Mountain Freeway and the destruction of the South Mountain. See attachment.</p> <p>²¹⁰ ADOT, South Mountain Study Team, Chapter 2 <i>Gila River Indian Community Coordination</i> p. 3 found at http://www.azdot.gov/Highways/Valley_Freeways/Loop_202/South_Mountain/PDF/FHWA-AZ-EIS/02-SMDEIS-Chapter-2-Gila-River-Indian-Community-Coordination.pdf.</p>

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45 (cont.)		<p>Chapter 1, <i>Purpose and Need</i>, was developed based on Federal Highway Administration guidance in terms of complying with the National Environmental Policy Act with respect to the purpose and need for a proposed action. As noted on page 1-1 of the Draft Environmental Impact Statement, “...if the lead agency concludes ... there is no need, an EIS would not be prepared...” The determination of purpose and need in terms of assessing if a transportation problem exists that warrants action was done objectively, defensibly and without pre-determination and in so doing, the Arizona Department of Transportation and Federal Highway Administration facilitated an environmental impact statement process without a determination that the proposed action is “... an absolute necessary component of the Maricopa Association of Governments master-plan...” as is incorrectly stated in the comment.</p> <p>The purpose and need criteria used to define the transportation problem are described (see Figures 1-8, 1-9, 1-10, 1-11, 1-12, and 1-13). The summation of the need for the proposed action is described in the conclusions section, beginning on page 1-21 of the Draft Environmental Impact Statement.</p> <p>In accordance with the National Environmental Policy Act, a range of reasonable action alternatives to carry forward for further analysis was determined through application of multidisciplinary criteria in a logical, step-wise progression. Alternatives were not disposed of or dismissed without a thorough evaluation using the multidisciplinary criteria outlined in the alternatives development and screening process presented in Chapter 3 of the Draft Environmental Impact Statement. The preferred alternative was the outcome to this process.</p> <p>A thorough feasible and prudent avoidance analysis of the South Mountains was conducted as presented in Chapter 5 of the Draft and Final Environmental Impact Statements and concluded avoidance to the direct use of the resource was not feasible and prudent. In support of this response and given the concerns about the South Mountains, consider the following review from the U.S. Department of the Interior on the Draft Environmental Impact Statement: comment: “Following our review of the Section 4(f) Evaluation, we concur that there is no feasible or prudent alternative to the Preferred Alternative selected in the document, and that all measures have been taken to minimize harm to these resources.” The complete letter can be found in Appendix 7, Volume III, on page B4 of the Final Environmental Impact Statement.</p>
46	Tribal Involvement	<p>Section 106 of the National Historic Preservation Act requires a government-to-government relationship between the Federal Government and Indian tribes as described beginning on page 4-140 of the Final Environmental Impact Statement. Section 106 requires that federal agencies take into account the effects of their undertakings on historic properties. This process requires consultation with tribal authorities. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. The consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Register of Historic Places eligibility recommendations (including traditional cultural properties), project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed. As noted in Table 4-47 that begins on page 4-145 of the Final</p>

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46 (cont.)		<p>Environmental Impact Statement, the Gila River Indian Community was initially consulted in 2003 with subsequent contact in 2005, 2006, 2007, 2008, 2010, 2011, 2012, and 2013. This supports an early and continued consultation with the Gila River Indian Community related to resources of importance.</p> <p>This consultation has resulted in concurrence from the State Historic Preservation Office and Gila River Indian Community Tribal Historic Preservation Office on National Historic Preservation Act eligibility recommendations, project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed. However, there is no requirement to consult with individual tribal members under Section 106.</p> <p>Agency scoping comments from the project initiation in 2001 are presented beginning on page 6-3 of the Draft and Final Environmental Impact Statements. The Gila River Indian Community was part of the agency scoping process.</p> <p>While specific topics are not identified in Table 2-1 of the Draft Environmental Impact Statement, cultural resource-related issues were a standard topic and the Bureau of Indian Affairs were regular attendees at these consultation and coordination meetings. Additionally, Gila River Indian Community concerns are summarized on page 2-10 of the Draft and Final Environmental Impact Statements. As noted in Table 4-47 beginning on page 4-145 of the Final Environmental Impact Statement, the Bureau of Indian Affairs has been consulted over the course of the project on cultural resources-related issues.</p> <p>Also, the Bureau of Indian Affairs, as a cooperating agency, reviewed the Draft Environmental Impact Statement prior to the public release. The Bureau of Indian Affairs approved the document for release with only minor comment.</p> <p>Since the beginning of the environmental impact statement process for the proposed freeway, the Federal Highway Administration and Arizona Department of Transportation have been carrying out cultural resources studies and engaging in an ongoing, open dialogue with the Gila River Indian Community, its Tribal Historic Preservation Officer, and its Cultural Resource Management Program regarding the identification and evaluation of places of religious and cultural importance to the tribe that may be adversely affected by the proposed freeway. Such places are referred to as traditional cultural properties. The Gila River Indian Community's own Cultural Resource Management Program performed the cultural field investigations and developed recommendations for mitigation for project impacts. As a result of these discussions and of studies conducted by the Gila River Indian Community's Cultural Resource Management Program, the Gila River Indian Community has identified traditional cultural properties that are eligible for listing in the National Register of Historic Places and that could be affected by construction of the proposed freeway. In certain cases, listing these properties on the National Register of Historic Places may offer them protection under Section 4(f) of the Department of Transportation Act. The traditional cultural properties identified are culturally important to other Native American tribes as well. The Yavapai-Prescott Indian Tribe deferred to the Southern Tribes to take the lead in identifying the traditional cultural properties. A response from Salt River Pima-Maricopa Indian Community dated August 14, 2012 cited the existing consultation management agreement between the Four Southern Tribes (Ak-Chin Indian Community, Gila River Indian Community,</p>

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47	<p>ADOT has minimally consulted with the GRIC in the scoping and preparing of the DEIS both officially and unofficially. While ADOT indicates that it has conducted 178 meetings with GRIC on its South Mountain Loop 202 proposal between 2001 to 2012, only three, all in 2011, were identified as cultural resource consultation meetings and none were attended by the BIA.²⁰⁷ Further, these cultural resource consultation meetings were designated as “Meetings Focused on the Proposed On-Community Alignment, 2010-2012 biasing any efforts to satisfy the goals of a cultural resource consultation meeting. The National Park Services’ guidance for federal historic preservation programs states: “consultation means the process of seeking, discussing, and considering the views of others, and, where feasible, seeking agreement with them on how historic properties should be identified, considered, and managed. Consultation is built upon the exchange of ideas, not simply providing information.”²⁰⁸ Further, consultation should start early for a proposed project, not 9 years after conducting meetings. And those best equipped to communicate the tribes’ sensitivities to cultural places should be consulted with and not just met with so as to satisfy what it believes is its Title VI and EJ requirements.²⁰⁹</p> <p>ADOT spent the first 9 years just informing GRIC representatives what its plan were and trying to “coordinate” its agenda -not consulting: ADOT worked mainly with the Natural Resources Standing Committee (NRSC) and the Transportation Technical Team (TTT). The NRSC is a special committee reporting to the Community Council that reviews all land use actions under its jurisdiction, acts as a key decision-making agent in actions pertaining to land use effects on Community land, and issues right-of-entry permits for non-Community members wishing to conduct a survey or other data collection tasks on Community land.” And the TTT is a special committee established by the Community Council...to facilitate informed decisions on transportation requests.²¹⁰ These two committees do not participate in consultation, which is something very different from making land use decisions, issuing right-of-entry permits for non-Community members, and facilitating informed decisions on transportation requests.</p> <p>Moreover, ADOT didn’t conduct the informational scoping meetings itself. The DEIS states that in August 2010 while ADOT believed it still could secure an on-reservation alignment, it presented an environmental and engineering overview outlining the freeway and its</p> <p>²⁰⁷ None of these meetings was the one that the Four Southern Tribes of Arizona attended. (ADOT, South Mountain Study Team, Chapter 2 <i>Gila River Indian Community Coordination</i> at 4-7); The federal government is obligated by its “trust responsibility” to represent the best interests of tribes and their members. This specific responsibility is delegated to the U.S. Bureau of Indian Affairs (BIA).” (<i>Id.</i> at 2); Under Executive Order 13,175, each federal agency must establish a process for consultation with tribal officials in the development and implementation of “policies that have tribal implications” based upon the “unique legal relationship” between the United States and “Indian tribal governments as set forth in the Constitution of the United States, treaties, statutes, Executive Orders, and court decisions.” (65 FED. REG. 67249 (Nov. 6, 2000) https://www.federalregister.gov/articles/2000/11/09/00-29003/consultation-and-coordination-with-indian-tribal (last visited July 15, 2013)). With the BIA as one of ADOT’s partners, any ADOT action with the South Mountain Freeway is dependent on it complying with Executive Order 13,175.</p> <p>²⁰⁸ National Park Service, The Secretary of the Interior’s Standards and Guidelines for Federal Agency Historic Preservation Programs pursuant to the National Historic Preservation Act, 63 FED. REG. 20496, 20504 (Apr. 24, 1998).</p> <p>²⁰⁹ While the Elderly Concerns Group was met with twice, in 2001 and in then in 2002 by ADOT, nothing came of it. Because their concerns did not influence the DEIS, the Group on June 12, 2013 had to make a formal motion that the Elderly Concerns Group was opposed to the South Mountain Freeway and the destruction of the South Mountain. See attachment.</p> <p>²¹⁰ ADOT, South Mountain Study Team, Chapter 2 <i>Gila River Indian Community Coordination</i> p. 3 found at http://www.azdot.gov/Highways/Valley_Freeways/Loop_202/South_Mountain/PDF/FHWA-AZ-EIS/02-SMDEIS-Chapter-2-Gila-River-Indian-Community-Coordination.pdf.</p>

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46 (cont.)		<p>Salt River Pima-Maricopa Indian Community, and Tohono O’odham Nation) and stated that the Four Southern Tribes are in consensus that Gila River Indian Community would take the lead in providing comments for the project. For more discussion of traditional cultural properties, see Draft Environmental Impact Statement pages 4-129 through 4-132, 4-148, and 5-26 through 5-28.</p> <p>In investigating the comment, it was noted that two of the meetings referred to in Table 2-2 discussed resources that were located off the Gila River Indian Community. As a result, these two meetings (8/4/2011 and 11/30/2011) have been removed from Table 2-2 and were added to Table 4-47 beginning on page 4-145 of the Final Environmental Impact Statement.</p>
47	Tribal Involvement	<p>Public and agency scoping for the proposed action was conducted in accordance with the requirements established by the National Environmental Policy Act as disclosed in Chapter 6 of the Draft Environmental Impact Statement. Agency scoping comments from the project initiation in 2001 are presented beginning on page 6-3 of the Draft Environmental Impact Statement. The Gila River Indian Community was part of the agency scoping process.</p> <p>As stated on page 2-8 of the Draft Environmental Impact Statement, the meetings in 2010 between the Gila River Indian Community’s Transportation Technical Team, Arizona Department of Transportation, and the Federal Highway Administration were held in response to a request received from the Governor of the Gila River Indian Community and were not a part of the agency or public scoping process. The information provided to the Transportation Technical Team was used by the Team and the Public Information Office in the Gila River Indian Community’s outreach effort prior to the February 2012 coordinated referendum. The referendum and the outreach effort were tribal actions and, other than providing requested information to the Gila River Indian Community, Arizona Department of Transportation and Federal Highway Administration did not participate in these actions.</p>

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47	<p>impacts on GRIC land to the TTT, who with the help of the Public Information office solicited recommendations and comments from GRIC tribal members on an off-reservation and an on-reservation alignment.²¹¹ The DEIS states that meetings were held from December 2010 through March 2011 in each of the seven districts, with some districts having multiple meetings.²¹² The DEIS states that meetings were also held with special interest groups and a total of 15 meetings occurred.²¹³ GRACE states that these meetings were heard about only if one participated in certain closed meetings and only certain people were invited to those closed meetings. Further, many in attendance questioned why ADOT was not conducting these meetings but rather GRIC representatives. It appears that ADOT inappropriately gave its duty for scoping and community outreach to tribal representatives, and failed to make sufficient and direct efforts to engage GRIC tribal members between December 2010 and March 2011.</p> <p>The only information publicized in the GRIN that the general GRIC community had before they voted in February 2012 to voice their opinion about the South Mountain was a paid ad by Pangea in the December 2011 and January 2012 GRIN telling tribal members that an on-reservation build would save South Mountain and an off-reservation build would desecrate South Mountain and an article by GRACE in the January 2012 GRIN expressing that a no build was an option, which meant that neither the reservation would be built on nor would South Mountain be desecrated. Still, uninterested in knowing how an off and an on-reservation build would impact the GRIC negatively,²¹⁴ without conducting consultation and arguably never communicating with the general GRIC community themselves, ADOT moved forward with designing only one eastern alternative through the South Mountain. Needless to say, many GRIC tribal members felt they had not been consulted. One GRIC tribal member stated: “A.D.O.T. did not ask in proper manners what we as a community would like done or not done with our sacred place of gathering.”²¹⁵ See attachment.</p> <p>As a sovereign nation with historical, cultural, and spiritual connections with lands no longer fully assessable but which they have rights to, adequate consultation is necessary. Not only does the NHPA require consultation with the GRIC because the South Mountain is a TCP with religious and cultural significance²¹⁶ but Executive Order 12898 Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations also calls for consultation. Executive Order 12898 states “each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations.”²¹⁷ Nonetheless, after listing ADOT’s meetings with the GRIC, Chapter 2’s <i>Gila River Indian Community Coordination</i> ends with, “in</p> <p>²¹¹ <i>Id.</i> at 8. ²¹² <i>Id.</i> at 8. ²¹³ <i>Id.</i> at 8. ²¹⁴ GRACE’s article in the January 2012 GRIN states “Both proposed freeway alignments destroy the mountain. The on reservation alignment will force the loss of more than 600 acres of GRIC lands at the base of South Mountain (source: Kimberly Dutcher, GRIC Law Office). These sites are full of cultural significance, and The Arizona Department of Transportation (ADOT) knows this. By destroying the foothills of Muhadag Do’ag, we destroy the entire mountain, as well as Muhadag Do’ag’s connection to the Estrellas. And what about the Pee Posh and O’odham families that would fall victim to the on-reservation alignment, and lose their homes to the freeway?” GRIN, Jan. 2012 15, NO.01 p. 4 found at www.gilariver.org/news ²¹⁵ Nicole Johns, GRIC tribal member, Aff. ¶ 5 June 29, 2013. ²¹⁶ 16 U.S.C. § 470a(d)(6)(B); 36 C.F.R. §§ 800.3(d) and (f)(2) and 36 C.F.R. § 800.2(c)(2)(ii). ²¹⁷ Exec. Order No. 12898, 59 Fed. Reg. (Feb. 11, 1994) found at http://www.archives.gov/federal-register/executive-orders/pdf/12898.pdf.</p>
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48	Environmental Justice	<p>Section 106 of the National Historic Preservation Act requires a government-to-government relationship between the Federal Government and Indian tribes as described beginning on page 4-140 of the Final Environmental Impact Statement. Section 106 requires that federal agencies take into account the effects of their undertakings on historic properties. This process requires consultation with tribal authorities. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. The consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Register of Historic Places eligibility recommendations (including traditional cultural properties), project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed. However, there is no requirement to consult with individual tribal members under Section 106.</p> <p>The section entitled <i>Title VI and Environmental Justice</i>, beginning on page 4-29 in the Draft Environmental Impact Statement, presents acceptable methods, data, and assumptions to assess the potential for disproportionately high and adverse effects from the proposed action on environmental justice populations and disparate impacts to populations protected under Title VI. Based upon the content of the section, no such effects would result from the action alternatives.</p> <p>In light of comments received on the Draft Environmental Impact Statement, the above-referenced conclusions were confirmed in the preparation of the Final Environmental Impact Statement. To provide further clarity, the discussions of environmental justice and Title VI were separated and additional text explaining the relationship of environmental justice and Title VI to various environmental elements was added throughout Chapter 4, <i>Affected Environment, Environmental Consequences, and Mitigation</i>, as exemplified by the inserted text on page 4-29 of the Final Environmental Impact Statement.</p>

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49	<p>accordance with Executive Order 12898, on environmental justice, and with Title VI of the Civil Rights Act of 1964 (Title VI), the coordination efforts outlined in this chapter establish that reasonable efforts have been made to engage and provide the Community’s population access to the EIS process for the proposed action.”²¹⁸</p> <p>ADOT’s weak coordination efforts and flimsy access to the EIS process however are not enough: Title VI fundamentally requires consultation where exchange of ideas happens to prevent disparate impacts that Title VI prohibits. One-sided informational meetings, which most of the various GRIC meetings were between 2001 and 2012 do not give a community the potential to affect the opinions of the decision makers. The meetings to discuss the South Mountain Loop 202 were only for technical, information gathering, and for ADOT to present its intent and not for consultation. For example, while the DEIS acknowledges that the Community Council is “the primary decision-making and legislative body for the Community....consist(ing) of 17 members elected by residents of the Community’s seven districts”²¹⁹, ADOT only coordinated two meetings with them, one in 2003 that only included community council representatives from districts 4, 6, and 7 and another in 2005. It is apparent ADOT was only meeting to satisfy what it allegedly believed its requirements were under Executive Order 12898 and Title VI to “coordinate” and “engage”²²⁰ the GRIC, and moreover, to “ensure full and fair participation”²²¹ –again, not to truly consult or to consider anything but an on-reservation or a South Mountain Preserve alignment.</p> <p>Additionally, ADOT’s meetings between 2001 and 2012 with the GRIC were not even full and fair. As a potential especially affected group, full and fair mean equal opportunity to participate and communicate ones position. For example, between 2010 through 2012, none of the 76 meetings focused on the proposed on-reservation alignment were conducted in districts three or five because as chapter 2 <i>GRIC Coordination</i> states, they would have been “less affected” by an on reservation alignment. This is not true because overall, the reservation is community land and any change of use will affect all tribal members. Further, a no-build is an equally legitimate option that NEPA requires analyzed. However, the meetings between 2001 and 2009 were conducted under the assumption that an alternative on the reservation was obtainable, while the meetings between 2010 and 2012 were conducted under the assumption an on-reservation alignment could be ultimately negotiated: none of the meetings therefore consulted and considered alternatives focusing on the effects and impacts on the GRIC for using GRIC land or the effects and impacts on the GRIC for desecrating sacred land. For example, chapter 2 goes on and says “informational meetings have been conducted with District 1 and 2 representatives regarding project status and identification of their concerns regarding the proposed action. These meetings occurred in 2002; both Districts 1 and 2 are outside of the Study Area. Although presentations to Districts 1 and 2 have not been made since 2002, articles regarding the project have appeared in the Gila River Indian News.”²²² One GRIC tribal member stated “I wasn’t notified about the meetings that they had about this freeway being built. I believe that they should of set out flyers to notify people not just only landowners but members of our community that should also be included to this matter that is coming in affect to our</p> <p>²¹⁸ ADOT, South Mountain Study Team, Chapter 2 <i>Gila River Indian Community Coordination</i> at 11. ²¹⁹ ADOT, South Mountain Study Team, Chapter 2 <i>Gila River Indian Community Coordination</i> at 3. ²²⁰ <i>Id.</i> at 1, 4. ²²¹ ADOT, South Mountain Study Team, chapter 4 <i>Affected Environment, Environmental Consequences, and Mitigation</i> at 29. ²²² ADOT, South Mountain Study Team, Chapter 2 <i>Gila River Indian Community Coordination</i> at 8.</p>

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49	Tribal Involvement	<p>The Arizona Department of Transportation and Federal Highway Administration provided equal access to the public participation process to the Gila River Indian Community and its members. The Arizona Department of Transportation and Federal Highway Administration solicited input from the Gila River Indian Community and other Native American tribes and tribal members and considered fully the substantive input and comments that were received. Efforts to involve the Gila River Indian Community in the environmental impact statement process are documented in Chapter 2 of the Final Environmental Impact Statement. Gila River Indian Community members were able to comment on the environmental impact statement process and its content at any time during the preparation of the Draft Environmental Impact Statement and through the comment period once the Draft Environmental Impact Statement was issued. Public involvement with the Gila River Indian Community was conducted as requested by the tribal government. Prior to October 2005, early efforts to involve the Gila River Indian Community included attending tribal meetings and monthly meetings with Gila River Indian Community Departments (see discussion beginning on page 2-8 of the Draft and Final Environmental Impact Statements). On October 14, 2005, the Gila River Indian Community requested that all project-related communications take place at a government-to-government level (see letter on page A152 of Appendix 1-1). This request was honored by the Arizona Department of Transportation and Federal Highway Administration. All public involvement efforts were implemented by the Gila River Indian Community’s public involvement officer. This is disclosed in Chapter 2 of the Final Environmental Impact Statement.</p> <p>Project communication with Gila River Indian Community officials followed a protocol established for this study, from years of previous consultation and coordination recognizing the sovereign nation status of the Gila River Indian Community and with respect for the Gila River Indian Community’s cultural norms. Consultation and coordination occurred one-on-one with the appropriate Gila River Indian Community officials. Representatives from the Gila River Indian Community participated for years in the South Mountain Citizens Advisory Team until early 2006, when the Gila River Indian Community requested all project-related communications take place at the government-to-government level. During the public comment period, Gila River Indian Community members were provided the same opportunities to attend the public hearing and participate in a public forum as all other populations.</p>

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50	<p>accordance with Executive Order 12898, on environmental justice, and with Title VI of the Civil Rights Act of 1964 (Title VI), the coordination efforts outlined in this chapter establish that reasonable efforts have been made to engage and provide the Community’s population access to the EIS process for the proposed action.”²¹⁸</p> <p>ADOT’s weak coordination efforts and flimsy access to the EIS process however are not enough: Title VI fundamentally requires consultation where exchange of ideas happens to prevent disparate impacts that Title VI prohibits. One-sided informational meetings, which most of the various GRIC meetings were between 2001 and 2012 do not give a community the potential to affect the opinions of the decision makers. The meetings to discuss the South Mountain Loop 202 were only for technical, information gathering, and for ADOT to present its intent and not for consultation. For example, while the DEIS acknowledges that the Community Council is “the primary decision-making and legislative body for the Community....consist(ing) of 17 members elected by residents of the Community’s seven districts”²¹⁹, ADOT only coordinated two meetings with them, one in 2003 that only included community council representatives from districts 4, 6, and 7 and another in 2005. It is apparent ADOT was only meeting to satisfy what it allegedly believed its requirements were under Executive Order 12898 and Title VI to “coordinate” and “engage”²²⁰ the GRIC, and moreover, to “ensure full and fair participation”²²¹ –again, not to truly consult or to consider anything but an on-reservation or a South Mountain Preserve alignment.</p> <p>Additionally, ADOT’s meetings between 2001 and 2012 with the GRIC were not even full and fair. As a potential especially affected group, full and fair mean equal opportunity to participate and communicate ones position. For example, between 2010 through 2012, none of the 76 meetings focused on the proposed on-reservation alignment were conducted in districts three or five because as chapter 2 <i>GRIC Coordination</i> states, they would have been “less affected” by an on reservation alignment. This is not true because overall, the reservation is community land and any change of use will affect all tribal members. Further, a no-build is an equally legitimate option that NEPA requires analyzed. However, the meetings between 2001 and 2009 were conducted under the assumption that an alternative on the reservation was obtainable, while the meetings between 2010 and 2012 were conducted under the assumption an on-reservation alignment could be ultimately negotiated: none of the meetings therefore consulted and considered alternatives focusing on the effects and impacts on the GRIC for using GRIC land or the effects and impacts on the GRIC for desecrating sacred land. For example, chapter 2 goes on and says “informational meetings have been conducted with District 1 and 2 representatives regarding project status and identification of their concerns regarding the proposed action. These meetings occurred in 2002; both Districts 1 and 2 are outside of the Study Area. Although presentations to Districts 1 and 2 have not been made since 2002, articles regarding the project have appeared in the Gila River Indian News.”²²² One GRIC tribal member stated “I wasn’t notified about the meetings that they had about this freeway being built. I believe that they should of set out flyers to notify people not just only landowners but members of our community that should also be included to this matter that is coming in affect to our</p> <p>²¹⁸ ADOT, South Mountain Study Team, Chapter 2 <i>Gila River Indian Community Coordination</i> at 11. ²¹⁹ ADOT, South Mountain Study Team, Chapter 2 <i>Gila River Indian Community Coordination</i> at 3. ²²⁰ <i>Id.</i> at 1, 4. ²²¹ ADOT, South Mountain Study Team, chapter 4 <i>Affected Environment, Environmental Consequences, and Mitigation</i> at 29. ²²² ADOT, South Mountain Study Team, Chapter 2 <i>Gila River Indian Community Coordination</i> at 8.</p>

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50	Tribal Involvement	<p>As discussed on page 2-4 of the Draft Environmental Impact Statement, in August 2000, the Gila River Indian Community Council passed Resolution GR-64-96. This resolution concluded that the Gila River Indian Community Council strongly opposed any future alignment of the South Mountain Freeway on Gila River Indian Community land. That resolution has never been rescinded by Gila River Indian Community Council and is still considered in force and to represent the will of the Gila River Indian Community by the Arizona Department of Transportation and Federal Highway Administration. The comments received from Gila River Indian Community Governor Gregory Mendoza (see letter dated July 11, 2013, on page B38 in Appendix 7, Volume III, of the Final Environmental Impact Statement) confirm the Gila River Indian Community’s position.</p> <p>As stated on page 2-8 of the Draft Environmental Impact Statement, the meetings in 2010 between the Gila River Indian Community’s Transportation Technical Team, Arizona Department of Transportation, and the Federal Highway Administration were held in response to a request received from the Governor of the Gila River Indian Community and were not a part of the agency or public scoping process. The information provided to the Transportation Technical Team was used by the Team and the Public Information Office in the Gila River Indian Community’s outreach effort prior to the February 2012 coordinated referendum. The referendum and the outreach effort were tribal actions and, other than providing requested information to the Gila River Indian Community, Arizona Department of Transportation and Federal Highway Administration did not participate in these actions.</p> <p>It is unclear to what timeframe the inadequate notification comment is referring. However, the Arizona Department of Transportation and Federal Highway Administration have attended meetings as requested by Gila River Indian Community groups, including the Gila Borderlands Advisory Committee and the Elderly Concerns Group. To keep Gila River Indian Community members engaged in the process and to ensure adequate access to project activities, three newsletters have been provided to the Gila River Indian Community for distribution and articles have been provided to the <i>Gila River Indian News</i> for inclusion in the weekly tribal newspaper. The Arizona Department of Transportation has participated in the Gila River Indian Community’s annual fair to answer questions regarding the proposed action. Times and locations of all public meetings (see Chapter 6, <i>Comments and Coordination</i>) relating to the project have been advertised to the Gila River Indian Community, inviting members to attend.</p> <p>Offers to the Gila River Indian Community Manager to host a public outreach event on the Gila River Indian Community began in summer 2012. The Gila River Indian Community first officially responded to this offer at the April 30, 2013 meeting of the Transportation Technical Team. During this meeting, the Gila River Indian Community Manager requested a community forum be conducted on the Gila River Indian Community following the public hearing. This was the only request the Arizona Department of Transportation received from the Gila River Indian Community regarding whether the Arizona Department of Transportation could hold a public outreach event during the public comment period. The Arizona Department of Transportation agreed to do so, and a community forum was held on June 22, 2013 at the Komatke Boys & Girls Club on the Gila River Indian Community.</p>

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51	<p>reservation.”²²³ See attachment. Another tribal member stated “I don’t know why they can’t hold a meeting in each District to see what the people think. Even though it is for landowners. But I think it is going to affect the whole reservation.”²²⁴</p> <p>GRIC’s issues and concerns of the environmental, health, and cultural cumulative impacts on them and the misuse of transportation dollars for unnecessary highway expansion in the name of parochial economic development could not be considered in the decision making process because they were ignored by ADOT’s tunnel vision agenda of obtaining an on-reservation alignment so that they could spare the South Mountain and the Ahwatukee Foothills.²²⁵ No evidence suggests that the GRIC’s concerns were appropriately considered: why else after the GRIC voted for a no-build²²⁶ did ADOT end up with only one eastern alternative that goes through the GRIC’s sacred mountain.</p> <p>The community forum meetings during the 90 day comment period also were not full and fair.²²⁷ As a nation with an oral tradition centered around community involvement and community transmission, (which is very different from a written tradition that is individualistic and easily transferable by non-community engagement), the one ADOT meeting on the reservation did not allow for formal “public testimony”. Rather, the meeting only allowed participants to report to a court reporter who recorded GRIC members’ comments individually. This was unfair as the May 21st downtown Phoenix public hearing allowed people to speak with a court reporter, complete a comment form, or give a formal 3-minute comment (public testimony).²²⁸ By the time GRIC’s community forum meeting came around June 22, 2013, the three options offered at the downtown Phoenix public hearing narrowed into only speaking with a court reporter or completing a comment form. Attendees at the GRIC community forum meeting were also forbidden to bring signs and banners to communicate and voice their opinions. These restrictions were a great insult to tribal members, especially since they felt excluded from the DEIS scoping and preparation of the DEIS. Also, the same video that was played at the beginning of the release of the DEIS and that can be found on the website was played over and over at this meeting instead of providing tribal members the opportunity to address everyone at the meeting.</p> <p>²²³ Winnona Catha, GRIC tribal member, Aff. ¶ 3 July 2, 2013. ²²⁴ Bernadette Stevens, GRIC tribal member, Aff. ¶ 5 July 2, 2013. ²²⁵ For example, after many failed attempts, Ahwatukee Foothills representative DiCiccio was hired by ADOT in 2006 as a consultant to negotiate with the GRIC to reconsider allowing the freeway on its land. (Scan Holstege, The Republic, <i>1998 plan for South Mountain Freeway passed</i>, March 25, 2013 http://www.azcentral.com/community/ahwatukee/articles/20130308south-mountain-freeway-plan-ignored.html (last visited July 11, 2013)). ²²⁶ In late 2011, the GRIC Community Council passed a resolution to hold a Community-wide referendum on the freeway. The referendum asked members whether they supported an on-reservation alignment, an off-reservation alignment, or a “no-build” option. On February 7, 2012, most GRIC voters voted for the “no-build” option. ²²⁷ Meetings were held in: Ahwatukee Foothills Village; Avondale; Chandler; Estrella Village; Gila River Indian Community; and Laveen Village. Public testimony was formally prohibited at all meetings. (ADOT, Public participant Guide for the Loop 202 South Mountain Freeway Study Draft Environmental Impact Statement, found at http://www.smonlinehearing.com/files/2313/6881/9504/SMTN_Meeting_Guide.pdf; However, public testimony was allowed at the May 21st Phoenix Public Hearing. ²²⁸ ADOT, You’re invited! Loop 202 South Mountain Freeway Study Draft Environmental Impact Statement Available for Public Review and Comment, found at http://www.azdot.gov/Highways/EPG/EPG_Common/PDF/Public_Notices/Loop202-South-Mountain-Freeway-project.pdf.</p>

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50 (cont.)		<p>The Arizona Department of Transportation advertisement efforts of the public hearing and public forums are documented in Chapter 6 of the Final Environmental Impact Statement beginning on page 6-23. The Gila River Indian Community Communication and Public Affairs Office informed the Arizona Department of Transportation that all communication and distribution of informational materials on Gila River Indian Community land would be handled by the Communication and Public Affairs Office. Advertisement text regarding the project, the public comment period, the public hearing and the various ways for the public to submit comments regarding the South Mountain Freeway Draft Environmental Impact Statement was given to the Gila River Indian Community’s Public Information Officer at the Transportation Technical Team meeting on April 30, 2013. Two advertisements regarding the public hearing, information regarding the location and availability of the Draft Environmental Impact Statement, and a map of the alternatives was placed in the May 2013 monthly issue of the <i>Gila River Indian News</i>.</p> <p>The Arizona Department of Transportation Community Relations distributed electronic notices (e-newsletters) through the Government Delivery system to over 12,000 constituents who voluntarily signed up for project alerts along the Interstate 10 Papago, Maricopa, and Santan Freeways. These electronic notices included notice of availability of Draft Environmental Impact Statement (distributed on April 26, 2013); public hearing (distributed on May 10, 2013); the community forums (distributed on May 29, 2013) and one in June (close of the Draft Environmental Impact Statement public comment period). In addition, anyone who had attended a previous meeting on the proposed action and signed in received all of this information mailed individually. On May 6, 2013, 73,564 mailers were distributed to addresses within the Study Area.</p>
51	Tribal Involvement	<p>As earlier comments recognize, the Arizona Department of Transportation and Federal Highway Administration solicited input from the Gila River Indian Community and other Native American tribes and tribal members and considered fully the substantive input and comments that were received. While efforts to study project alternatives on Community land that did not directly impact South Mountain were attempted, as noted on page 2-8 of the Draft Environmental Impact Statement, a coordinated referendum occurred in February 2012, and Gila River Indian Community members voted in favor of the no-build option. Therefore, the on-Gila River Indian Community alignment was eliminated from further study. Any alternative on Gila River Indian Community land must consider tribal sovereignty. Tribal sovereignty is based in the inherent authority of Native American tribes to govern themselves. While this notion of sovereignty is manifested in many areas, generally Native American land is held in trust by the United States. Native American communities have the authority to regulate land uses and activities on their lands. States have very limited authority over activities within tribal land (see page 2-1 of the Final Environmental Impact Statement). From a practical standpoint, this means that the Arizona Department of Transportation and Federal Highway Administration do not have the authority to survey tribal land, make land use (including transportation) determinations directly affecting tribal land, or condemn tribal land for public benefit through an eminent domain process.</p> <p>However, mitigation measures developed through consultation and coordination with the Tribal Historic Preservation Office and other concerned parties would be considered for implementation in any final action.</p>

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52	<p>reservation.”²²³ See attachment. Another tribal member stated “I don’t know why they can’t hold a meeting in each District to see what the people think. Even though it is for landowners. But I think it is going to affect the whole reservation.”²²⁴</p> <p>GRIC’s issues and concerns of the environmental, health, and cultural cumulative impacts on them and the misuse of transportation dollars for unnecessary highway expansion in the name of parochial economic development could not be considered in the decision making process because they were ignored by ADOT’s tunnel vision agenda of obtaining an on-reservation alignment so that they could spare the South Mountain and the Ahwatukee Foothills.²²⁵ No evidence suggests that the GRIC’s concerns were appropriately considered: why else after the GRIC voted for a no-build²²⁶ did ADOT end up with only one eastern alternative that goes through the GRIC’s sacred mountain.</p> <p>The community forum meetings during the 90 day comment period also were not full and fair.²²⁷ As a nation with an oral tradition centered around community involvement and community transmission, (which is very different from a written tradition that is individualistic and easily transferable by non-community engagement), the one ADOT meeting on the reservation did not allow for formal “public testimony”. Rather, the meeting only allowed participants to report to a court reporter who recorded GRIC members’ comments individually. This was unfair as the May 21st downtown Phoenix public hearing allowed people to speak with a court reporter, complete a comment form, or give a formal 3-minute comment (public testimony).²²⁸ By the time GRIC’s community forum meeting came around June 22, 2013, the three options offered at the downtown Phoenix public hearing narrowed into only speaking with a court reporter or completing a comment form. Attendees at the GRIC community forum meeting were also forbidden to bring signs and banners to communicate and voice their opinions. These restrictions were a great insult to tribal members, especially since they felt excluded from the DEIS scoping and preparation of the DEIS. Also, the same video that was played at the beginning of the release of the DEIS and that can be found on the website was played over and over at this meeting instead of providing tribal members the opportunity to address everyone at the meeting.</p> <p>²²³ Winona Catha, GRIC tribal member, Aff. ¶ 3 July 2, 2013. ²²⁴ Bernadette Stevens, GRIC tribal member, Aff. ¶ 5 July 2, 2013. ²²⁵ For example, after many failed attempts, Ahwatukee Foothills representative DiCiccio was hired by ADOT in 2006 as a consultant to negotiate with the GRIC to reconsider allowing the freeway on its land. (Sean Holstege, The Republic, <i>1998 plan for South Mountain Freeway passed</i>, March 25, 2013 http://www.azcentral.com/community/ahwatukee/articles/20130308south-mountain-freeway-plan-ignored.html (last visited July 11, 2013)). ²²⁶ In late 2011, the GRIC Community Council passed a resolution to hold a Community-wide referendum on the freeway. The referendum asked members whether they supported an on-reservation alignment, an off-reservation alignment, or a “no-build” option. On February 7, 2012, most GRIC voters voted for the “no-build” option. ²²⁷ Meetings were held in: Ahwatukee Foothills Village; Avondale; Chandler; Estrella Village; Gila River Indian Community; and Laveen Village. Public testimony was formally prohibited at all meetings. (ADOT, Public participant Guide for the Loop 202 South Mountain Freeway Study Draft Environmental Impact Statement, found at http://www.smfonlinehearing.com/files/2313/6881/9504/SMTN_Meeting_Guide.pdf; However, public testimony was allowed at the May 21st Phoenix Public Hearing. ²²⁸ ADOT, You’re invited! Loop 202 South Mountain Freeway Study Draft Environmental Impact Statement Available for Public Review and Comment, found at http://www.azdot.gov/Highways/EPG/EPG_Common/PDF/Public_Notices/Loop202-South-Mountain-Freeway-project.pdf.</p>

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51 (cont.)		<p>In accordance with the National Environmental Policy Act, a range of reasonable action alternatives to carry forward for further analysis was determined through application of multidisciplinary criteria in a logical, step-wise progression. Alternatives were not disposed of or dismissed without a thorough evaluation using the multidisciplinary criteria outlined in the alternatives development and screening process presented in Chapter 3 of the Draft Environmental Impact Statement. The preferred alternative was the outcome to this process.</p> <p>As noted in the previous comment response, the Draft Environmental Impact Statement on page 2-4 acknowledges that the Gila River Indian Community Council passed Resolution GR-64-96 that strongly opposed any future alignment of the South Mountain Freeway on Community land. In addition, the comments received from Gila River Indian Community Governor Gregory Mendoza (see letter dated July 11, 2013, on page B38 in Appendix 7, Volume III, of the Final Environmental Impact Statement) confirm the Gila River Indian Community’s position. To clarify, the comment concludes that because a distinct population conducts a vote, the outcome of said vote should be deemed as “final” when, such a vote is the reflection of a population subset of a much larger population. The environmental impact statement process accounts for such information from the voter outcome as a contributing factor to be taken into account as one of many factors to consider in terms of the National Environmental Policy Act decision making intent to promote a more informed decision in regards to the proposed action. Any alternative on Gila River Indian Community land must consider tribal sovereignty. Tribal sovereignty is based in the inherent authority of Native American tribes to govern themselves. While this notion of sovereignty is manifested in many areas, generally Native American land is held in trust by the United States. Native American communities have the authority to regulate land uses and activities on their lands. States have very limited authority over activities within tribal land (see page 2-1 of the Final Environmental Impact Statement). From a practical standpoint, this means that the Arizona Department of Transportation and Federal Highway Administration do not have the authority to survey tribal land, make land use (including transportation) determinations directly affecting tribal land, or condemn tribal land for public benefit through an eminent domain process.</p>
52	Tribal Involvement	<p>The comment is correct that the opportunity for public testimony was offered only at the public hearing on May 21, 2013. The six community forums, including the one at the Komatke Boys & Girls Club offered the opportunity to view the same materials, present comments in writing or to a court reporter and were formatted in exactly the same manner. However, signs and banners were also prohibited at the public hearing on May 21.</p> <p>Community forums were held after the public hearing to further invite public comment.</p> <p>The public hearing for the proposed action was widely advertised. Newspaper ads in six newspapers of area-wide distribution ran advertisements at least twice each. Announcements occurred on five radio stations and six television stations. Mailers were sent on May 6, 2013 to 73,564 individuals (approximately 311 on the Gila River Indian Community) who had previously expressed an interest in the project. The Arizona Department of Transportation utilized the Government Delivery system to distribute to over 12,000 recipients. E-newsletters were distributed on three different occasions. All materials were also provided to the Gila River Indian Community Public Information Officer.</p>

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53	<p>“Many Community members voiced disappointment in the format of the forum, which they said was completely from ADOT’s perspective...and...one-sided”.²²⁹ One GRIC tribal member stated “I was unable to attend the ONE and only meeting that I would have been allowed to speak at publicly. As stated before I don’t travel to the Phoenix metro-area due to the distance, pollution and the heat. I am an elder that is in a wheelchair, which needs assistance to get around. Attending this meeting was impractical for me and the ONE meeting held in the Gila River Indian Community was held over fifty miles from my home. I feel that A.D.O.T. violated my civil right by not allowing anyone to speak at the meeting held in the Gila River Indian Community, as well as other meetings held in other communities. I was raised by oral traditions, I was taught to speak out, and I have a right to be heard in a public forum.”²³⁰ See attachment. Another GRIC tribal member said “I feel ADOT discriminated against us all at the last public forum held in Komatke, AZ. Gila River Indian Community members were not able to voice their public comments. No matter where the meetings are held. All parties whether you are against or for the freeway should be able to speak. No meeting should be one sided for any reason what so ever. That is very unfair. Again this is a fast fix to eliminate process that everyone should abide by.”²³¹ See attachment.</p> <p>Notice was also inadequate. The June 22 meeting was not publicized on GRIN until an ADOT advertisement appeared on GRIN the day before the actual event.²³² This did not give tribal members enough notice to plan and prepare to attend the meeting, especially because many GRIC members lack transportation. To make matters worse, transportation was not provided to the GRIC as promised for the downtown Phoenix public hearing. Because of this, minimal GRIC participation at the Phoenix meeting was possible. In attempting to obtain community transportation for the Phoenix event, GRACE representative, Lori Riddle, called to speak with ADOT on numerous occasions to ask about transportation assistance. However, no one ever picked up. She had to leave messages and left several until ADOT’s answering machine became too full to allow her to leave any more messages. Then, when she then turned to MAG’s Senior Engineer Bob Hazlett for assistance in resolving this issue, he only shrugged his shoulders at her and said that it was just discovered that the ADOT message machine was designed to take up to 12 or so messages at a time. He said nothing else and did nothing to help. Not until the Phoenix meeting, did ADOT then hand out instructions about transportation assistance. And, then when GRACE tried to secure transportation for GRIC tribal members for the on-reservation public forum meeting on June 22, 2013, ADOT failed to provide vans to pick up tribal members that many of the GRIC needed to attend the meeting. At the last moment, ADOT put the responsibility on the GRIC requesting that GRACE representative, Lori Riddle, provide ADOT with a list of those who needed transportation with their contact information and addresses: because of the time constraints, this was not possible to provide.</p> <p>One GRIC tribal member summed up ADOT’s performance with the GRIC: “the manner in which ADOT has pursued the Gila River community member’s voice and cooperation regarding the Draft Environmental Impact Study and the planning process has been poor to say</p> <p>²²⁹ Joshua Jovanelly, GRIC Website, ADOT outreach on proposed 202 ext. held in Komatke http://www.gilariver.org/index.php/news/3829-adot-outreach-on-proposed-202-ext-held-in-komatke (last visited July 15, 2013).</p> <p>²³⁰ Peggy Mae Morago, GRIC tribal member, Aff. ¶ 4 July 6, 2013.</p> <p>²³¹ Fairietta Morago, GRIC tribal member, Aff. ¶ 6.</p> <p>²³² GRIN, <i>Learn More about the DEIS</i>, June 21, 2013 found at http://www.gilariver.org/GRIN/JUNE_21_GRIN_Final.pdf.</p>
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52 (cont.)		The Arizona Department of Transportation provided vouchers for public hearing parking and for public transit to the hearing. For the first time in the State’s history, a shuttle bus to the hearing was provided from six locations in the Phoenix area, including two on the Gila River Indian Community (Komatke Boys & Girls Club and the Governance Center in Sacaton). All ads provided telephone numbers and electronic contact information regarding information on the shuttle schedules and pick-up locations.
53	Tribal Involvement	Although not everyone could possibly be accommodated under all circumstances, all parties were offered equal access to the public hearing. Equal opportunities were offered to all that wished to participate. The endeavor to engage all population segments exceeded National Environmental Policy Act requirements pertinent to public outreach and involvement. The outreach was full and fair; all members of the population including those in the Gila River Indian Community were provided opportunity to provide oral and written testimony in a manner appropriate to National Environmental Policy Act requirements with sufficient opportunity and time and means to participate in such engagement. The outreach also provided ample opportunity for those with special needs to inform Arizona Department of Transportation and Federal Highway Administration of special needs to allow Arizona Department of Transportation and Federal Highway Administration to be responsive to those special needs. Specifics of the outreach associated with the Draft Environmental Impact Statement comment period can be found in Chapter 6, <i>Comments and Coordination</i> , of the Final Environmental Impact Statement
54	Tribal Involvement	Community forums were held after the public hearing to further invite public comment. The public hearing for the proposed action was widely advertised. Newspaper ads in six newspapers of area-wide distribution ran advertisements at least twice each. Announcements occurred on five radio stations and six television stations. Mailers were sent on May 6, 2013 to 73,564 individuals (approximately 311 on the Gila River Indian Community) who had previously expressed an interest in the project. The Arizona Department of Transportation utilized the Government Delivery system to distribute to over 12,000 recipients. E-newsletters were distributed on three different occasions. All materials were also provided to the Gila River Indian Community Public Information Officer. Offers to the Gila River Indian Community Manager to host a public outreach event on the Gila River Indian Community began in summer 2012. The Gila River Indian Community first officially responded to this offer at the April 30, 2013 meeting of the Transportation Technical Team. During this meeting, the Gila River Indian Community Manager requested a community forum be conducted on the Gila River Indian Community following the public hearing. This was the only request the Arizona Department of Transportation received from the Gila River Indian Community regarding whether the Arizona Department of Transportation could hold a public outreach event during the public comment period. The Arizona Department of Transportation agreed to do so, and a community forum was held on June 22, 2013, at the Komatke Boys & Girls Club on the Gila River Indian Community.

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55	<p>“Many Community members voiced disappointment in the format of the forum, which they said was completely from ADOT’s perspective...and...one-sided”.²²⁹ One GRIC tribal member stated “I was unable to attend the ONE and only meeting that I would have been allowed to speak at publicly. As stated before I don’t travel to the Phoenix metro-area due to the distance, pollution and the heat. I am an elder that is in a wheelchair, which needs assistance to get around. Attending this meeting was impractical for me and the ONE meeting held in the Gila River Indian Community was held over fifty miles from my home. I feel that A.D.O.T. violated my civil right by not allowing anyone to speak at the meeting held in the Gila River Indian Community, as well as other meetings held in other communities. I was raised by oral traditions, I was taught to speak out, and I have a right to be heard in a public forum.”²³⁰ See attachment. Another GRIC tribal member said “I feel ADOT discriminated against us all at the last public forum held in Komatke, AZ. Gila River Indian Community members were not able to voice their public comments. No matter where the meetings are held. All parties whether you are against or for the freeway should be able to speak. No meeting should be one sided for any reason what so ever. That is very unfair. Again this is a fast fix to eliminate process that everyone should abide by.”²³¹ See attachment.</p> <p>Notice was also inadequate. The June 22 meeting was not publicized on GRIN until an ADOT advertisement appeared on GRIN the day before the actual event.²³² This did not give tribal members enough notice to plan and prepare to attend the meeting, especially because many GRIC members lack transportation. To make matters worse, transportation was not provided to the GRIC as promised for the downtown Phoenix public hearing. Because of this, minimal GRIC participation at the Phoenix meeting was possible. In attempting to obtain community transportation for the Phoenix event, GRACE representative, Lori Riddle, called to speak with ADOT on numerous occasions to ask about transportation assistance. However, no one ever picked up. She had to leave messages and left several until ADOT’s answering machine became too full to allow her to leave any more messages. Then, when she then turned to MAG’s Senior Engineer Bob Hazlett for assistance in resolving this issue, he only shrugged his shoulders at her and said that it was just discovered that the ADOT message machine was designed to take up to 12 or so messages at a time. He said nothing else and did nothing to help. Not until the Phoenix meeting, did ADOT then hand out instructions about transportation assistance. And, then when GRACE tried to secure transportation for GRIC tribal members for the on-reservation public forum meeting on June 22, 2013, ADOT failed to provide vans to pick up tribal members that many of the GRIC needed to attend the meeting. At the last moment, ADOT put the responsibility on the GRIC requesting that GRACE representative, Lori Riddle, provide ADOT with a list of those who needed transportation with their contact information and addresses: because of the time constraints, this was not possible to provide.</p> <p>One GRIC tribal member summed up ADOT’s performance with the GRIC: “the manner in which ADOT has pursued the Gila River community member’s voice and cooperation regarding the Draft Environmental Impact Study and the planning process has been poor to say</p> <p>²²⁹ Joshua Jovanelly, GRIC Website, ADOT outreach on proposed 202 ext. held in Komatke http://www.gilariver.org/index.php/news/3829-adot-outreach-on-proposed-202-ext-held-in-komatke (last visited July 15, 2013).</p> <p>²³⁰ Peggy Mae Morago, GRIC tribal member, Aff. ¶ 4 July 6, 2013.</p> <p>²³¹ Fairietta Morago, GRIC tribal member, Aff. ¶ 6.</p> <p>²³² GRIN, <i>Learn More about the DEIS</i>, June 21, 2013 found at http://www.gilariver.org/GRIN/JUNE_21_GRIN_Final.pdf.</p>

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54 (cont.)		<p>The Arizona Department of Transportation advertisement efforts of the public hearing and public forums are documented in Chapter 6 of the Final Environmental Impact Statement beginning on page 6-23. The Gila River Indian Community Communication and Public Affairs Office informed the Arizona Department of Transportation that all communication and distribution of informational materials on Gila River Indian Community land would be handled by the Communication and Public Affairs Office. Advertisement text regarding the project, the public comment period, the public hearing and the various ways for the public to submit comments regarding the South Mountain Freeway Draft Environmental Impact Statement was given to the Gila River Indian Community’s Public Information Officer at the Transportation Technical Team meeting on April 30, 2013. Two advertisements regarding the public hearing, information regarding the location and availability of the Draft Environmental Impact Statement, and a map of the alternatives was placed in the May 2013 monthly issue of the <i>Gila River Indian News</i>.</p> <p>Like the public hearing, the community forums were widely advertised. In addition to the efforts of the Gila River Indian Community Communication and Public Affairs Office, Arizona Department of Transportation ran newspaper ads in six newspapers of area-wide distribution four times each. In addition to these sources, The Gila River Indian Community’s facebook page advertised the hearing and the community forum on the Gila River Indian Community. Likewise, the Gila River Against Loop 202 facebook page advertised the hearing, public transportation to the hearing, and the community forum on the Gila River Indian Community.</p>
55	Tribal Involvement	<p>As noted in Chapter 2 of the Final Environmental Impact Statement, efforts to involve the Gila River Indian Community, a sovereign nation, in the environmental impact statement process are extensive. Public involvement with the Gila River Indian Community was conducted as requested by the tribal government. Prior to October 2005, early efforts to involve the Gila River Indian Community included attending tribal meetings and monthly meetings with Gila River Indian Community Departments (see discussion beginning on page 2-8 of the Draft and Final Environmental Impact Statements). On October 14, 2005, the Gila River Indian Community requested that all project-related communications take place at a government-to-government level (see letter on page A152 of Appendix 1-1). This request was honored by the Arizona Department of Transportation and Federal Highway Administration. All public involvement efforts were implemented by the Gila River Indian Community’s public involvement officer.</p> <p>The individuals who felt that they were not included in the comment process are doing so through this complaint.</p> <p>Community forums were held after the public hearing to further invite public comment.</p>

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56	<p>the least. There was very little communication between the GRIC and MAG and ADOT. When community members were made aware of public hearings and meetings, it was short notice and not sympathetic to our community members lack of transportation. Furthermore, when ADOT did hold a “Public Forum” in GRIC, members were not to voice their statements verbally as others were able to do at the Phoenix hearing.”²³³ See attachment.</p> <p>ADOT also circulated and gave out inaccurate information about the GRIC, creating the false impression that the GRIC did not have as much to lose in the South Mountain Loop 202.²³⁴ While participating in this ADOT community forum meeting on the GRIC, GRIC attendees recognized that while in the DEIS there are two TCPs²³⁵ discussed, both of which would be completely destroyed if the proposed freeway extension was built, the ADOT posters at the meeting did not show this.²³⁶ When the attendees asked the ADOT representatives why this was so, different representatives replied in various ways: one said that the posters were outdated, another said there were no inaccuracies, and another stated that the discrepancies were up for interpretation.²³⁷ The posters also did not list other O’odham cultural resources such as petroglyph sites and prehistoric trails rich in artifact remains.²³⁸ It can only be guessed at how much damage the inadequate and incompetent presentation of the GRIC’s many cultural and sacred areas and artifacts have done in regards to the dialogue and understanding of this project. It also shows what is produced by inadequate consultation, full and fair participation, and actual coordination.</p> <p>D. NO SUBSTANTIAL LEGITIMATE JUSTIFICATION FOR SOUTH MOUNTAIN LOOP 202 AND FEASIBLE, REASONABLE AND NON-DISCRIMINATORY ALTERNATIVES EXIST FOR ADOT</p> <p>As enumerated in the facts of the DEIS, ADOT is well aware of the sacredness of the South Mountain and the role that the mountain plays in the GRIC tribal members’ culture and heritage. Title VI requires that recipients of federal funding such as ADOT must not take actions that have a disproportionate effect /disparate impact on peoples of a specific color, race, or national origin such as the people of the GRIC who are Native Americans.</p> <p>With sacred places that must be undisturbed and where rituals and ceremonies may not even be conducted without the right environment, the South Mountain Loop would disparately impact GRIC tribal members. Here, there is an Indigenous Peoples, whose culture is embedded with its relationship with the South Mountain environment –known as a sacred territory-- from which they get physical, mental, and spiritual life. The desecration of South Mountain by construction and operation of a highway loop would result in a monumental disparate impact and a prohibited discriminatory effect. Further, the health and environmental impacts would also be disproportionately burdensome on the GRIC. Native Americans are supposed to be afforded civil rights protections from the majority: this is why GRACE requests ADOT to protect and to not</p> <p>²³³ Renee Jackson, GRIC tribal member, Aff. ¶ 3. ²³⁴ Akimel o’odham youth collective’s Blog, <i>O’odham Zombies March Against the 202</i>, June 24, 2013 http://aoycblog.wordpress.com/ (last visited July 18, 2013). ²³⁵ The prehistoric Huhukam villages and the Pueblo del Alamo and Villa Buena. ²³⁶ Akimel o’odham youth collective’s Blog, <i>O’odham Zombies March Against the 202</i>, June 24, 2013 http://aoycblog.wordpress.com/ (last visited July 18, 2013). ²³⁷ <i>Id.</i> ²³⁸ <i>Id.</i></p>
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56	Cultural Resources	<p>The descriptions of cultural resources and potential effects to those resources as discussed in the Draft Environmental Impact Statement were correct and complete. The banners produced for the public meetings were necessarily abbreviated and simplified for quick summaries of information. The first banner related to Chapter 4, <i>Affected Environment, Environmental Consequences, and Mitigation</i>, contained two important cautions to the public:</p> <p>“Chapter 4 of the Draft Environmental Impact Statement includes a substantial discussion of those elements of the environment most affected by the proposed freeway.” and</p> <p>“Viewers are urged to review the contents of Chapter 4 to obtain more information about the environmental elements presented in the banners.”</p> <p>The banners accurately represented the number of National Register of Historic Place-eligible archaeological sites that would be adversely affected by alternative (2 to 7 sites, depending on alternative) and Traditional Cultural Properties - South Mountains (0 for Western Alternative, 1 for the E1 Alternative). The National Register of Historic Places-eligible archaeological sites that would be adversely affected presented in the banner included the trails and artifact remains referenced in the comment. The National Register of Historic Places-eligible petroglyph sites referenced in the comment would be avoided by the alternatives.</p> <p>Potential adverse effects to Villa Buena and Pueblo del Alamo as archaeological sites would be addressed under Section 106 of the National Historic Preservation Act. Potential impacts to Villa Buena and Pueblo del Alamo as Traditional Cultural Properties would be addressed through the implementation of the enhancement and management plan developed in consultation with the Gila River Indian Community’s Cultural Resources Management Program and the Tribal Historic Preservation Officer (see page 4-142 of the Final Environmental Impact Statement). This plan outlines measures that would sufficiently reduce or eliminate the potential for adverse effect to the National Register of Historic Places-eligible Traditional Cultural Properties attributes of Villa Buena and Pueblo del Alamo.</p>
57	Title VI	<p>Since the beginning of the environmental impact statement process, the Federal Highway Administration and Arizona Department of Transportation have been carrying out cultural resources studies and engaging in ongoing, open consultation with the Gila River Indian Community Tribal Historic Preservation Office regarding the identification and evaluation of places of religious and cultural importance to the tribe that may be adversely affected by the proposed freeway. Such places are referred to as traditional cultural properties. As a result of these discussions and of studies conducted by the Gila River Indian Community’s Cultural Resource Management Program, the Gila River Indian Community has identified traditional cultural properties that are eligible for listing in the National Register of Historic Places and that could be affected by construction of the proposed freeway. In certain cases, listing these properties on the National Register of Historic Places may offer them protection under Section 4(f) of the Department of Transportation Act. The traditional cultural properties identified are culturally important to other Native American tribes as well. For more discussion of traditional cultural properties, see the section, <i>Cultural Resources</i>, beginning on page 4-140 of the Final Environmental Impact Statement and pages 5-26 through 5-28.</p>

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57 (cont.)		Section 106 of the National Historic Preservation Act requires a government-to-government relationship between the Federal Government and Indian tribes as described beginning on page 4-140 of the Final Environmental Impact Statement. Section 106 requires that federal agencies take into account the effects of their undertakings on historic properties. This process requires consultation with tribal authorities. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. The consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Register of Historic Places eligibility recommendations (including traditional cultural properties), project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.
58	Title VI, Environmental Justice	<p>The section entitled <i>Title VI and Environmental Justice</i>, beginning on page 4-29 in the Draft Environmental Impact Statement, presents acceptable methods, data, and assumptions to assess the potential for disproportionately high and adverse effects from the proposed action on environmental justice populations and disparate impacts to populations protected under Title VI. Based upon the content of the section, no such effects would result from the action alternatives.</p> <p>In light of comments received on the Draft Environmental Impact Statement, the above-referenced conclusions were confirmed in the preparation of the Final Environmental Impact Statement. To provide further clarity, the discussions of environmental justice and Title VI were separated and additional text explaining the relationship of environmental justice and Title VI to various environmental elements was added throughout Chapter 4, <i>Affected Environment, Environmental Consequences, and Mitigation</i>, as exemplified by the inserted text on page 4-29 of the Final Environmental Impact Statement.</p> <p>The cultural and religious places of importance, like the South Mountains, are acknowledged in the Draft Environmental Impact Statement in several locations, notably pages 4-132 and 5-26. The proposed project would accommodate and preserve (to the fullest extent possible from the available alternatives) access to the South Mountains for religious practices.</p> <p>The Arizona Department of Transportation and Federal Highway Administration provided equal access to the public participation process to the Gila River Indian Community and its members. The Arizona Department of Transportation and Federal Highway Administration solicited input from the Gila River Indian Community and other Native American tribes and tribal members and fully considered input and comments that were received.</p>

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58	<p>purposely create a disparate impact on a protected class of people that would have a monumental and disastrous effect on the welfare and quality of life of the GRIC.</p> <p>For all of the effort that was put into spelling out environmental justice requirements, Title VI itself was not defined, nor was it evaluated effectively in the DEIS. ADOT's August 2008 South Mountain Transportation Corridor Study Citizens Advisory Team Draft Technical Report Summary/Cultural Resources states that "by law, adverse impacts on cultural resources determined eligible for listing in the NRHP must be mitigated. The degree of mitigation required is directly related to the historic designation as described by Section 106. Direct impacts from construction on cultural resources determined to be of religious or traditional cultural importance by Native American groups or others could result in desecration of a sacred place. A potential indirect impact might be a community's loss of access to a culturally important place as a result of construction restrictions."²³⁹</p> <p>ADOT's August 2008 South Mountain Transportation Corridor Study Citizens Advisory Team Draft Technical Report Summary/Environmental Justice ²⁴⁰ acknowledged that GRIC was a protected peoples²⁴¹ under Title VI; however, it made no mention that evaluating sacred places through the lens of Section 106 of the NHPA that requires "agencies to take into account the effects of their undertakings on historic properties, and afford the Advisory Council on Historic Preservation a reasonable opportunity to comment,"²⁴² does not eliminate the necessity of evaluating the disparate impact of losing sacred places, culture, heritage, etc. based on Title VI.²⁴³ In this document, Title VI was not analyzed.</p> <p>In chapter 4 of ADOT's DEIS, Title VI is only mentioned as a subset of Environmental Justice and the 1994 Executive Order 12898 on environmental justice; moreover, it is not defined. Title VI is not a policy or an executive order, but is the law and must be complied with as the rule of the law. Only in a short sidebar, does chapter 4 say, "in addressing environmental justice, it is important to understand whether the proposed action would have disproportionately high and adverse impacts on the protected population"²⁴⁴ but it doesn't say this in regards to Title VI or spell out its criteria. Rather, it directs the reader to go on to Land Use, Social Conditions, Displacements and Relocations, Economic Impacts, Air Quality, Noise, Cultural Resources, Visual Resources, Prime and Unique Farmlands, and Temporary Construction Impacts, which essentially are various sections of the DEIS that are over hundreds of pages long.</p> <p>²³⁹ ADOT, South Mountain Transportation Corridor Study Citizens Advisory Team Draft Technical Report <i>Summary Cultural Resources</i> August 28, 2008 p. 2 found at http://www.azdot.gov/southmountainfreeway/PDF/082808_SMCAT_CulturalResources_Summary_Final.pdf.</p> <p>²⁴⁰ ADOT, South Mountain Transportation Corridor Study Citizens Advisory Team Draft Technical Report <i>Summary Environmental Justice</i>, found at http://www.azdot.gov/southmountainfreeway/PDF/062608_SMF_CAT_EJ_Summary_Final.pdf.</p> <p>²⁴¹ It appears that in this report, ADOT is not identifying GRIC accurately as a protected class. It is protected because of race not by color. The US Census currently identifies the following races: white, black or African American, American Indian and Alaska Native, Asian, Native Hawaiian and other Pacific Islander. Race, Definition (last visited 6/23/2013) http://quickfacts.census.gov/qfd/meta/long_RHI525211.htm). Further, the protection is because of a history of discrimination; therefore, the disparate impact must be evaluated through the lens of the class of people experiencing political, social, economic, cultural discrimination historically.</p> <p>²⁴² Section 106 Regulations Summary http://www.achp.gov/106summary.html (last visited 6/23/2013).</p> <p>²⁴³ This section on Title VI errs in defining what it is by not defining it but rather, conflating it into a subsection of environmental justice. Title VI does have a place in environmental justice, but Title VI is much more than environmental justice.</p> <p>²⁴⁴ ADOT, South Mountain Study Team, Chapter 4 <i>Affected Environment, Environmental Consequences, and Mitigation</i> at 38.</p>
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58 (cont.)		Chapter 2 of the Final Environmental Impact Statement is dedicated to the explanation of the Gila River Indian Community outreach undertaken for the project. Chapter 6 of the Final Environmental Impact Statement further describes Gila River Indian Community outreach throughout the process. The Gila River Indian Community was provided equal opportunities to participate in the project as all other populations and agencies. This outreach was undertaken, in part, to ensure all populations had equal access to the process and, in part, to ensure disparate nor disproportionately high adverse impacts would result from the construction and operation of the proposed action.
59	Cultural Resources	<p>Section 106 of the National Historic Preservation Act requires a government-to-government relationship between the Federal Government and Indian tribes as described beginning on page 4-140 of the Final Environmental Impact Statement. Section 106 requires that federal agencies take into account the effects of their undertakings on historic properties. This process requires consultation with tribal authorities. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. The consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Register of Historic Places eligibility recommendations (including traditional cultural properties), project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed. As noted in Table 4-47 that begins on page 4-145, the Gila River Indian Community was initially consulted in 2003 with subsequent contact in 2005, 2006, 2007, 2008, 2010, 2011, 2012, and 2013. This supports an early and continued consultation with the Gila River Indian Community related to resources of importance. However, there is no requirement to consult with individual tribal members under Section 106.</p> <p>As a result of these discussions and of studies conducted by the Gila River Indian Community's Cultural Resource Management Program, the Gila River Indian Community has identified traditional cultural properties that are eligible for listing in the National Register of Historic Places and that could be affected by construction of the proposed freeway. In certain cases, listing these properties on the National Register of Historic Places may offer them protection under Section 4(f) of the Department of Transportation Act. The traditional cultural properties identified are culturally important to other Native American tribes as well. For more discussion of traditional cultural properties, see the section, <i>Cultural Resources</i>, beginning on page 4-140 of the Final Environmental Impact Statement and pages 5-26 through 5-28.</p>

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59 (cont.)		Section 106 of the National Historic Preservation Act requires a government-to-government relationship between the Federal Government and Indian tribes as described beginning on page 4-140 of the Final Environmental Impact Statement. Section 106 requires that federal agencies take into account the effects of their undertakings on historic properties. This process requires consultation with tribal authorities. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. The consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Register of Historic Places eligibility recommendations (including traditional cultural properties), project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.
60	Title VI, Environmental Justice	<p>The section entitled <i>Title VI and Environmental Justice</i>, beginning on page 4-29 in the Draft Environmental Impact Statement, presents acceptable methods, data, and assumptions to assess the potential for disproportionately high and adverse effects from the proposed action on environmental justice populations and disparate impacts to populations protected under Title VI. Based upon the content of the section, no such effects would result from the action alternatives.</p> <p>In light of comments received on the Draft Environmental Impact Statement, the above-referenced conclusions were confirmed in the preparation of the Final Environmental Impact Statement. To provide further clarity, the discussions of environmental justice and Title VI were separated and additional text explaining the relationship of environmental justice and Title VI to various environmental elements was added throughout Chapter 4, <i>Affected Environment, Environmental Consequences, and Mitigation</i>, as exemplified by the inserted text on page 4-29 of the Final Environmental Impact Statement.</p>

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61	<p>ADOT is responsible for ensuring its actions and non-actions do not violate Title VI. Building a freeway through and desecrating South Mountain disproportionately affects a protected class and may only be done if there is a substantial legitimate justification. Connecting Ahwatukee Foothills to Laveen so that businesses like malls and movie theaters can come in is not a substantial legitimate justification.²⁴⁵ Nor is alleviating traffic a substantial legitimate justification without first addressing the alleged problem of congestion²⁴⁶ and pollution when there are more prudent and feasible alternatives²⁴⁷, as well as, comparably effective alternatives with less of a disparate impact to choose from.</p> <p>A substantial legitimate justification for creating a disparate impact is just not found in the DEIS. To prove a “substantial legitimate justification,” the recipient of federal funds must show that the challenged action or non-action was “necessary to meeting a goal that was legitimate, important, and integral to the [recipient’s] institutional mission.”²⁴⁸ The justification must bear a “manifest demonstrable relationship” to the challenged policy.²⁴⁹ And there must not be an alternative that is comparably effective with less of a disparate impact.²⁵⁰</p> <p>ADOT purposely crafted its purpose and need to strategically make a no-build alternative appear non-debatable. The DEIS gives reasons for why it appears the proposal is favored and what the projects alleged purposes and needs are. The DEIS states that population growth, housing demand, economic growth, and the deficiencies in alternative modes of transportation</p> <p>²⁴⁵ In a Loop 202 Meeting in Laveen on May 21, 2013, Phoenix City Councilman Michael Nowakowski stated that Laveen has “plans for a hospital, a mall, restaurants and shops, but ... all the plans are dependent on the South Mountain Freeway being built...shops and businesses won’t come unless there’s a possibility that residents from other parts of the Valley could be attracted to the area.” (Allison Hurtado, Ahwatukee Foothills News, <i>Laveen residents gather to organize support for South Mountain Freeway</i>, http://www.ahwatukee.com/news/article_20023ca0-c1ab-11e2-befb-001a4bcf887a.html (last visited July 14, 2013)).</p> <p>²⁴⁶ Texas A&M’s 30th Urban Mobility Report ranks the Phoenix-Mesa metropolitan area 40th among U.S. cities for the average amount of time motorists spend in traffic jams. 39 other areas rank higher for congestion than Phoenix-Mesa.</p> <p>²⁴⁷ “Section 4(f) refers to the original section within the U.S. Department of Transportation Act of 1966 which established the requirement for consideration of park and recreational lands...and historic sites in transportation projects. The law, now codified in 49 U.S.C. §303 and 23 U.S.C. §138, is implemented by the Federal Highway Administration (FHWA) through the regulation 23 CFR 774. Before approving a project that uses Section 4(f) property (e.g. a public park like SMPP), FHWA must either (1) determine that the impacts are de minimis, or (2) undertake a Section 4(f) Evaluation. If the Section 4(f) Evaluation identifies a feasible and prudent alternative that completely avoids Section 4(f) properties, it must be selected. If there is no feasible and prudent alternative that avoids all Section 4(f) properties, FHWA has some discretion in selecting the alternative that causes the least overall harm (see discussion below). FHWA must also find that all possible planning to minimize harm to the Section 4(f) property has occurred.” (FHWA, <i>Section 4(f) at a Glance</i>, http://environment.fhwa.dot.gov/4f/4fAtGlance.asp (last visited July 15, 2013)). SCOTUS has provided parameters to guide interpretation of the statute in <i>Overton Park v. Volpe</i>. (401 U.S. 402 (1971)). The Court defined “feasible” as an alternative grounded in “sound engineering.” The Court interpreted a “prudent” alternative as one that would not present “unique” or “truly unusual” problems, or “costs or community disruption of extraordinary magnitude.” (Id. at 413). The Overton Park decision stressed that protection of 4(f) lands was of “paramount importance” under the statute. (Id. at 412-413). Here, there is a 4(f) land of paramount importance, a federally funded transportation project, impacts that are not de minimis, and prudent and feasible alternatives.</p> <p>²⁴⁸ <i>Sandoval v. Hagan</i>, 7 F.Supp. 2d 1234, 1278 (M.D. Ala. 1998), aff’d, 197 F.3d 484 (11th Cir. 1999), cert. granted sub. nom. Alexander v. Sandoval, ___ U.S. ___, 121 S.Ct. 28, 68 U.S.L.W. 3749 (U.S. Sept. 26, 2000) (No. 99-1908) (quoting Elston, 997 F.2d at 1413).</p> <p>²⁴⁹ Georgia State Conference, 775 F.2d. at 1418. See, e.g., Elston, 997 F. 2d at 1413.</p> <p>²⁵⁰ See Elston, 997 F.2d at 1407.</p>

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61	Title VI, Environmental Justice	<p>The obligation of the Arizona Department of Transportation and Federal Highway Administration, as the federal lead agency, in accordance with the National Environmental Policy Act is to assess if the proposed action and its alternatives would lead to substantial adverse environmental impacts, disclose those impacts and identify mitigation to reduce the impact below a level of significance (and if such mitigation is unavailable, disclose that such an impact would occur but not be mitigated). The section entitled <i>Title VI and Environmental Justice</i>, beginning on page 4-29 in the Draft Environmental Impact Statement, presents acceptable methods, data, and assumptions to assess the potential for disproportionately high and adverse effects from the proposed action on environmental justice populations and disparate impacts to populations protected under Title VI. Based on the content of the section, no such effects would result from the action alternatives. Even if one were to reach a contrary conclusion and determine that disproportionately high and adverse and/or disparate effects would occur as a result of the proposed freeway, there is substantial justification for the proposed freeway. It is needed to serve projected growth in population and accompanying transportation demand and to correct existing and projected transportation system deficiencies (see Chapter 1, <i>Purpose and Need</i>). There is no feasible and prudent alternative to the use of the South Mountains, as discussed in Chapter 5, <i>Section 4(f) Evaluation</i>.</p> <p>In light of comments received on the Draft Environmental Impact Statement, the above-referenced conclusions were confirmed in the preparation of the Final Environmental Impact Statement. To provide further clarity, the discussions of environmental justice and Title VI were separated and additional text explaining the relationship of environmental justice and Title VI to various environmental elements was added throughout Chapter 4, <i>Affected Environment, Environmental Consequences, and Mitigation</i>, as exemplified by the inserted text on page 4-29 of the Final Environmental Impact Statement.</p> <p>Chapter 2 of the Final Environmental Impact Statement is dedicated to the explanation of the Gila River Indian Community outreach undertaken for the project. Chapter 6 of the Final Environmental Impact Statement further describes Community outreach throughout the process. The Gila River Indian Community was provided equal opportunities to participate in the project as all other populations and agencies. This outreach was undertaken, in part, to ensure all populations had equal access to the process and, in part, to ensure disparate nor disproportionately high adverse impacts would result from the construction and operation of the proposed action.</p>

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	<p>make the South Mountain Loop absolutely necessary. Further, it argues a no-build solution is not a feasible alternative. The DEIS states that the proposed project’s purpose and need is to get people off the southern part of Phoenix out of the existing roads onto another route; it goes on to assert that this cannot be satisfied without creating this specific Loop. The DEIS asserts that moreover, this proposal has been supported since 1985 and would complete the last part of the master plan.²⁵¹ Therefore, it is claimed that a no-build could not fulfill this purpose and need. However, if the essential purpose and need is to reduce congestion, a no-build alternative using various transportation modalities, including rail serving the southwest and southeast suburbs of Phoenix, and that included changes in zoning, used the Census Bureau’s more realistic medium population prediction rather than the high prediction projection, acknowledged that the 2006 economic downturn has changed the future demographics of the area, and took a hard look on who actually would be using the South Mountain Loop 202, the purpose and need would still be fulfilled.²⁵² One no-build alternatives PARC has suggested is light rail along Pecos Road that would go through a small portion of the GRIC (with permission) rather than cutting through South Mountain.</p> <p>²⁵¹ The DEIS states that because voters voted for a one-half cent sales tax for transportation funding in 1985, then extended the life of that tax via proposition 400, and then canvassing results by MAG showed that over a majority of voters supported proposition 400, there is overall public support for the South Mountain Loop. However, both proposition 300 and 400 are general propositions for regional transportation projects and not for the South Mountain Loop specifically. Further, the South Mountain Loop proposal has always been extremely controversial and is opposed by many. Many find the South Mountain Loop outdated, bad for communities and too expensive. (Road Rage “Jana’s View” Phoenix Magazine Feb. http://www.janabommersbach.com/phx-mag-feb07.php (last visited June 26, 2013)). For example, many people of the Ahwatukee Foothills are opposed to the project. The loop would demolish recently built homes in this planned community in the foothills of South Mountain: some ask if it was that important, why it wasn’t already built and why the state let this development get so large. Protecting Arizona’s Resources and Children (PARC) also believes the project is unnecessary, financially irresponsible, and contrary to the public interest. (Allison Hurtado, Ahwatukee Foothills News, PARC to host public meeting about Loop 202, May 8, 2013 (last updated May 16, 2013) http://www.ahwatukee.com/community_focus/article_d7b6f25e-b748-11e2-a138-0019bb2963f4.html). South Mountain Park Board of Trustees is also against the project because the SMPP is a park preserve, land designated as conservation land: they say that this land is critical habitat and further fragmentation of natural desert will only expedite loss of species. It further degrades the essence of what a preserve is and moreover destroys highly culturally significant sites that are held sacred to many Native American Indians. The Sierra Club also opposes the South Mountain Loop for a variety of reasons, one of which is the argument that the South Mountain Loop will not reduce pollution in the long run: smart growth must be adopted and reliance of highway systems will not solve traffic or pollution problems. Don’t Waste Arizona also opposes the South Mountain Freeway arguing that NEPA was violated in multiple ways: no recent scoping was done; projections of growth are outdated, most current scientific data is not used; there is no purpose or need; major emergency planning issues were not even mentioned; and a huge superfund will need to be cleaned up. (Don’t Waste Arizona and PARC, Steve Brittle, http://player.vimeo.com/video/70051539 (last visited July 12, 2013)); and the Akimel O’odham Youth Collective has been very active and vocal about the cultural and health effects that the South Mountain highway would cause. (http://aoeycblog.wordpress.com/).</p> <p>²⁵² The US census gives low, medium, and high population projections. The DEIS used the high estimates. Further, the DEIS ignores that after 1990, population growth stopped speeding at the level the DEIS predicts for 2020 and 2035; Tom R. Rex, <i>New Population Projections For The United States, Arizona And Arizona Counties A Report from the Office of the University</i>, Economist Jan. 2013 found at http://wpcarey.asu.edu/seid/ccpr/upload/Projections.pdf.</p>
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61 (cont.)	Purpose and Need	<p>The comment further notes “Connecting Ahwatukee Foothills to Laveen so that businesses like malls and movie theaters can come in is not a substantial legitimate justification.” The comment infers the action is proposed to support/ promote development in the Study Area. Text beginning on page 4-170 of the Draft Environmental Impact Statement describes the proposed action’s relation to development in the Study Area in that it would be built in an area planned for urban growth as established in local jurisdictions’ land use planning activities for at least the last 25 years and that purpose of the project is not to promote economic development but to respond to a growing need for additional transportation capacity as a result of regional growth occurring now and as projected.</p> <p>As presented in Chapter 1, <i>Purpose and Need</i>, an objective and unbiased examination of the existing and planned future transportation network in the Study Area was undertaken to determine if the catalyst for the need for the environmental impact statement (being the proposed action) was still warranted. As explained in the chapter, the examination successfully attempted to provide an answer to whether or not a transportation problem(s) exist and would continue to exist in the foreseeable future. The analysis was undertaken in accordance with the National Environmental Policy Act and Federal Highway Administration guidance and policy for implementing the National Environmental Policy Act. The results confirmed the transportation problems as framed in the region’s adopted long range transportation plans (both past and present) still exist and would continue to exist in the foreseeable future. The need for action was not to implement the long range plan objectives but to correct a transportation problem in the region; a beneficial outcome in doing so was consistency with the region’s long range transportation planning activities.</p> <p>The purpose and need criteria used to frame the transportation problem are described (see Figures 1-8, 1-9, 1-10, 1-11, 1-12, and 1-13). As summarized in the section, <i>Conclusions</i>, beginning on page 1-21 of the Draft and Final Environmental Impact Statement, the analysis confirmed that without a major transportation facility in the Study Area, the region’s transportation network (as recognized in over 25 years of transportation planning) will not be able to efficiently move goods and people throughout the region without major investments in the region.</p> <p>The analyses in the Draft Environmental Impact Statement used socioeconomic and traffic projections at the regional analysis zone and traffic analysis zone levels. At the time of publication of the Draft Environmental Impact Statement, Census 2010-based socioeconomic data at the regional analysis zone and traffic analysis zone levels had not been adopted by the Maricopa Association of Governments and were not available to the project team. Therefore, the data used in the Draft Environmental Impact Statement were the most appropriate information available.</p>

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61 (cont.)		<p>The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future.</p>
	Alternatives	<p>In accordance with the National Environmental Policy Act, a range of reasonable action alternatives to carry forward for further analysis was determined through application of multidisciplinary criteria in a logical, step-wise progression. Alternatives were not disposed of or dismissed without a thorough evaluation using the multidisciplinary criteria outlined in the alternatives development and screening process presented in Chapter 3 of the Draft Environmental Impact Statement. The preferred alternative was the outcome to this process.</p> <p>In support of this response and given the concerns about the South Mountains, consider the following review from the U.S. Department of the Interior on the Draft Environmental Impact Statement: comment: “Following our review of the Section 4(f) Evaluation, we concur that there is no feasible or prudent alternative to the Preferred Alternative selected in the document, and that all measures have been taken to minimize harm to these resources.” The complete letter can be found in Appendix 7, Volume III, on page B4 of the Final Environmental Impact Statement.</p> <p>Comments from other groups (e.g., South Mountain Park Board of Trustees) will be addressed in the Final Environmental Impact Statement in the same manner as the Gila River Alliance for a Clean Environment’s comments are addressed.</p> <p>The information regarding the context and attributes of the South Mountains is disclosed in the Draft Environmental Impact Statement. The acreage of parkland to be converted to a transportation use is reported on page 5-14 in the section, <i>Direct Use</i>. It is reported that 31.3 acres or just less than 0.2 percent of the parkland would be converted (this is a reduction in the amount of use planned for in 1988). The text goes on to point out other concerns associated with the direct use reported, and text on page 5-14 in the sidebar, “<i>The South Mountains in Phoenix’s Sonoran Preserve System</i>”, describes the importance of Phoenix South Mountain Park/Preserve in the region. Beginning on page 5-23 in the section, <i>Measures to Minimize Harm</i>, measures are presented to be undertaken to address the use impacts, including land replacement, on properties adjacent to the park. The section, <i>Cultural Resources</i>, beginning on page 4-140, also discloses the relation of the proposed action to the cultural resource attributes of the South Mountains. The project team examined alternatives to avoid the park, but did not identify any feasible and prudent alternatives to avoid impacts. The Arizona Department of Transportation continues to work with park stakeholders to minimize impacts and address concerns. Measures to minimize harm to the park were developed (see Final Environmental Impact Statement, starting on page 5-23).</p> <p>The first segment of the Central Phoenix/East Valley Light Rail Transit project has been completed through central Phoenix, northern Tempe, and northwestern Mesa. While expansion routes are being studied, none would link the western and eastern termini of the proposed freeway in the Study Area. Most light rail lines radiate from a central demand generator (e.g., a central business district or major airport). Light rail</p>

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62	<p>The DEIS analysis of the no-build asserts that more pollution would result with nothing built and that the U.S. Environmental Protection Agency’s air quality standards could be met if the project went through. However, building more highway miles will only increase more driving and more pollution. And it would only motivate more urban sprawl that supports further development into the Sonoran desert of cultural significance. Moreover, the Sonoran desert is being reduced at record speed causing the loss of major ecosystem services.²⁵³ For example, the Sonoran desert regulates temperature. “As the Phoenix metropolitan area continues to sprawl, (replacing Sonoran desert with more development) the urban heat island will expand from the urban core further into suburban regions.”²⁵⁴ What Arizona’s unchecked urban sprawl is creating is unsustainability²⁵⁵ because for one, it is not controlling it with sustainable transportation.²⁵⁶ The urban heat island actually affects people of lower socioeconomic status elderly, and minorities, like Native Americans.²⁵⁷</p> <p>Moreover, because of their inaccurate assumptions and relative insignificance, the build verses no-build differences in percentage of trips in the study area, travel time to downtown, and differences in miles of 1-10 with 3 + hours of congestion do not identify a substantial legitimate justification for the financial cost, pollution consequences, and disparate impact to GRIC, as well as the additional consequence of added congestion on existing roadways for example, to bypass the additional 10 miles the loop would put on the Ahwatukee Foothills residents on their way to downtown Phoenix.²⁵⁸ According to the DEIS, the percent change in traffic on arterial streets would be 9% and the percent change in traffic on freeways would be 8%.²⁵⁹ Further, the DEIS estimates 10 saved minutes for travel time from Laveen to downtown and 6 saved minutes for Ahwatukee to downtown if the South Mountain Loop was constructed.²⁶⁰ And, the DEIS estimates that with the South Mountain Loop, there would be 7 less miles of 1-10 with 3+ hours of congestion in the morning and 12 less hours of congestion in the evening.²⁶¹</p> <p>The substantial legitimate justification argument fails by the fact that E-I as the preferred alternative for the east side had no other alternatives from which to compare or choose because, as the DEIS states, GRIC forbid ADOT from using GRIC reservation land for the South</p> <p>²⁵³ Ecosystem services are services from natural systems like deserts that assist humans either directly or indirectly. (de Groot, R.S., M.A. Wilson, and R. M.J. Boumans. 2002. A typology for the classification, description and valuation of ecosystem functions, goods, and services. <i>Ecological Economics</i> 41:393-408.)</p> <p>²⁵⁴ Sally Wittlinger, Decades, Arizona State University, <i>Sustainability: The Urban Heat Island</i> http://arizonaindicator.org/sites/default/files/content/publications/Decades-vol1-issue-10.pdf.</p> <p>²⁵⁵ The Brundtland Commission defined sustainability as a system that meets the needs of the present without compromising the needs of future generations. (United Nations Economic Commissions for Europe. Sustainable development - concept and action. http://www.unecce.org/oes/nutshell/2004-2005/focus_sustainable_development.html (last visited July 11, 2013)).</p> <p>²⁵⁶ Paul Mees, Transport for Suburbia: Beyond the Automobile Age Earthscan 2010.</p> <p>²⁵⁷ Rachel Morello-Frosch, <i>The Climate Gap: Inequalities in How Climate Change Hurts Americans & How to Close the Gap</i>, found at http://dornsife.usc.edu/pere/documents/The_Climate_Gap_Full_Report_FINAL.pdf.</p> <p>²⁵⁸ “If you are going to use the new Loop 202 to go to Downtown Phoenix, good luck as you just added another 10 miles to your route. The loop from I-10 (San Tan/Pecos) to 59th Avenue is 22 miles, and then add another 5 miles to back-track to Central and you have a total of 27 miles. The current distance from the same starting point is 17 miles.” (Jim Jochim, Ahwatukee Foothills News, <i>Proposed South Mountain Freeway will do permanent harm to our environment</i>, http://www.ahwatukee.com/tukee_talk/article_bc0a8868-d4c1-11e2-bbe4-0019bb2963f4.html (last visited July 14, 2013)).</p> <p>²⁵⁹ ADOT, South Mountain Study Team, Chapter 1: <i>Purpose and Need</i> Banner at http://www.smfonlinehearing.com/materials/chapter1/</p> <p>²⁶⁰ <i>Id.</i></p> <p>²⁶¹ <i>Id.</i></p>

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61 (cont.)		<p>along the proposed corridor would be inconsistent with a radial transit model and would not be able to connect to existing light rail or the planned extension. While light rail segments are planned in the <i>Regional Transportation Plan</i> near the western and eastern termini of the proposed freeway, no funds are available or anticipated to support a combined system through the Study Area. The light rail alternative alone or in combination with other nonfreeway alternatives would not meet the purpose and need criteria; specifically, they would not adequately address projected capacity and mobility needs of the region (see Figure 3-3 of the Final Environmental Impact Statement, which describes the contribution of these improvements to meeting regional transportation needs).</p> <p>The analyses in the Draft Environmental Impact Statement used socioeconomic and traffic projections at the regional analysis zone and traffic analysis zone levels. At the time of publication of the Draft Environmental Impact Statement, Census 2010-based socioeconomic data at the regional analysis zone and traffic analysis zone levels had not been adopted by the Maricopa Association of Governments and were not available to the project team. Therefore, the data used in the Draft Environmental Impact Statement were the most appropriate information available.</p> <p>The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future.</p>
62	Purpose and Need	<p>The Draft Environmental Impact Statement—particularly in Chapter 1, <i>Purpose and Need</i>, and Chapter 3, <i>Alternatives</i>—explains how the process of establishing a purpose and need for the proposed action followed nationally accepted guidance and policy. Examples of how the purpose and need analyses were applied include the:</p> <ul style="list-style-type: none">• section, <i>Context of Purpose and Need in the EIS Process</i>, on page 1-1• sidebar, “<i>A proposed action’s purpose and documentation should:</i>”, on page 1-1• sidebar, “<i>How are MAG data used in the DEIS?</i>”, on page 1-4• sidebar, “<i>What is the MAG regional demand model?</i>”, on page 1-5• sidebar, “<i>How will the economic downturn affect growth rates?</i>”, on page 1-11• section, <i>Need Based on Regional Transportation Demand and Existing and Projected Transportation System Capacity Deficiencies</i>, beginning on page 1-13• section, <i>Conclusions</i>, on page 1-21• section, <i>Reconfirm the Purpose and Need for the Proposed Action</i>, on page 3-1• section, <i>Responsiveness of the Proposed Freeway to Purpose and Need Criteria</i>, beginning on page 3-27 <p>The air quality assessment for the proposed freeway analyzed impacts from carbon monoxide and particulate matter (PM₁₀) and followed U.S. Environmental Protection Agency guidelines. No violations of either the carbon monoxide or particulate matter (PM₁₀) standards were identified, even at worst-case locations along the project corridor. Thus, the carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute</p>

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63	<p>The DEIS analysis of the no-build asserts that more pollution would result with nothing built and that the U.S. Environmental Protection Agency’s air quality standards could be met if the project went through. However, building more highway miles will only increase more driving and more pollution. And it would only motivate more urban sprawl that supports further development into the Sonoran desert of cultural significance. Moreover, the Sonoran desert is being reduced at record speed causing the loss of major ecosystem services.²⁵³ For example, the Sonoran desert regulates temperature. “As the Phoenix metropolitan area continues to sprawl, (replacing Sonoran desert with more development) the urban heat island will expand from the urban core further into suburban regions.”²⁵⁴ What Arizona’s unchecked urban sprawl is creating is unsustainability²⁵⁵ because for one, it is not controlling it with sustainable transportation.²⁵⁶ The urban heat island actually affects people of lower socioeconomic status elderly, and minorities, like Native Americans.²⁵⁷</p> <p>Moreover, because of their inaccurate assumptions and relative insignificance, the build verses no-build differences in percentage of trips in the study area, travel time to downtown, and differences in miles of 1-10 with 3 + hours of congestion do not identify a substantial legitimate justification for the financial cost, pollution consequences, and disparate impact to GRIC, as well as the additional consequence of added congestion on existing roadways for example, to bypass the additional 10 miles the loop would put on the Ahwatukee Foothills residents on their way to downtown Phoenix.²⁵⁸ According to the DEIS, the percent change in traffic on arterial streets would be 9% and the percent change in traffic on freeways would be 8%.²⁵⁹ Further, the DEIS estimates 10 saved minutes for travel time from Laveen to downtown and 6 saved minutes for Ahwatukee to downtown if the South Mountain Loop was constructed.²⁶⁰ And, the DEIS estimates that with the South Mountain Loop, there would be 7 less miles of 1-10 with 3+ hours of congestion in the morning and 12 less hours of congestion in the evening.²⁶¹</p> <p>The substantial legitimate justification argument fails by the fact that E-I as the preferred alternative for the east side had no other alternatives from which to compare or choose because, as the DEIS states, GRIC forbid ADOT from using GRIC reservation land for the South</p> <p>²⁵³ Ecosystem services are services from natural systems like deserts that assist humans either directly or indirectly. (de Groot, R.S., M.A. Wilson, and R. M.J. Boumans. 2002. A typology for the classification, description and valuation of ecosystem functions, goods, and services. Ecological Economics 41:393-408.)</p> <p>²⁵⁴ Sally Wittlinger, Decades, Arizona State University, <i>Sustainability: The Urban Heat Island</i> http://arizonaindicator.org/sites/default/files/content/publications/Decades-vol1-issue-10.pdf.</p> <p>²⁵⁵ The Brundtland Commission defined sustainability as a system that meets the needs of the present without compromising the needs of future generations. (United Nations Economic Commissions for Europe. Sustainable development - concept and action. http://www.unece.org/oes/nutshell/2004-2005/focus_sustainable_development.html (last visited July 11, 2013)).</p> <p>²⁵⁶ Paul Mees, Transport for Suburbia: Beyond the Automobile Age Earthscan 2010.</p> <p>²⁵⁷ Rachel Morello-Frosch, <i>The Climate Gap: Inequalities in How Climate Change Hurts Americans & How to Close the Gap</i>, found at http://dornsife.usc.edu/pere/documents/The_Climate_Gap_Full_Report_FINAL.pdf.</p> <p>²⁵⁸ “If you are going to use the new Loop 202 to go to Downtown Phoenix, good luck as you just added another 10 miles to your route. The loop from I-10 (San Tan/Pecos) to 59th Avenue is 22 miles, and then add another 5 miles to back-track to Central and you have a total of 27 miles. The current distance from the same starting point is 17 miles.” (Jim Jochim, Ahwatukee Foothills News, <i>Proposed South Mountain Freeway will do permanent harm to our environment</i>, http://www.ahwatukee.com/tukee_talk/article_bc0a8868-d4c1-11e2-bbe4-0019bb2963f4.html (last visited July 14, 2013)).</p> <p>²⁵⁹ ADOT, South Mountain Study Team, Chapter 1: <i>Purpose and Need</i> Banner at http://www.smfonlinehearing.com/materials/chapter1/</p> <p>²⁶⁰ <i>Id.</i></p> <p>²⁶¹ <i>Id.</i></p>
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62 (cont.)		to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones. For mobile source air toxics, the analysis showed that for the Study Area, constructing the freeway would have a marginal effect on annual emissions in 2025 and 2035 (less than a 1 percent difference in total annual emissions between the Preferred Alternative and No-Action Alternative). With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions. The air quality analyses were updated for the Final Environmental Impact Statement, including a quantitative particulate matter (PM ₁₀) analysis, and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement.
	Induced Growth	As described in Chapter 1, <i>Purpose and Need</i> , of the Draft and Final Environmental Impact Statements the Phoenix metropolitan area was subject to a conversion from natural desert landscape to an agricultural landscape well before any roadway existed in the valley. As described in the section, <i>Land Use</i> , beginning on page 4-3, land use patterns are predominantly the result of local and regional land use planning activities; further, the subject of induced growth and travel is addressed in text beginning on pages 4-167 and 4-179 of the Draft and Final Environmental Impact Statements, respectively.
	Heat Island	As buildings, parking lots, roads, and other infrastructure replace open land and vegetation, an urban heat island may result. The heat island effect is of a regional nature and, therefore, there is no requirement to analyze potential impacts and no possibility of determining the localized contribution at the project level to the regional heat island effect. It is likely, however, that a proposed project such as the South Mountain Freeway would be a minor contributor to the overall issue.
63	Purpose and Need	Chapter 1, <i>Purpose and Need</i> , of the Draft and Final Environmental Impact Statements examines the purpose and need for the proposed action in terms of defining a transportation problem. In doing so, assumptions associated with past need for the freeway were discounted as part of the environmental impact statement process. The results of the purpose and need analyses included the determination that a transportation problem (similar to the type of problem that has been represented in past Regional Transportation Plans) still exists in the area and that this problem is similar in characteristics to the transportation problem that existed in prior years. The alternatives analyses considered numerous modal alternatives, and it was concluded through the screening process that a road facility is the appropriate modal choice to address the transportation problem defined.
64	Alternatives	The comment notes “A substantial legitimate justification fails...” assumes a disparate impact would occur from the proposed freeway. As summarized in the first part of Response 65 above, no such disparate impact (and therefore, no violation of Title VI) would occur and as such, no such demonstration nor justification is required. Even if one were to reach a contrary conclusion and determine that disproportionately high and adverse and/or disparate effects would occur as a result of the proposed freeway, there is substantial justification for the proposed freeway. It is needed to serve projected growth in population and accompanying transportation demand and to correct existing and projected transportation system deficiencies (see Chapter 1, <i>Purpose and Need</i>). There is no feasible and prudent alternative to the use of the South Mountains, as discussed in Chapter 5, <i>Section 4(f) Evaluation</i> . Regardless, as explained in Chapter 3, <i>Alternatives</i> , the Study Area was split into a Western Section and Eastern Section. This was done so for reasons explained in that chapter. As explained in that chapter, a comprehensive set of alternatives in both sections of the Study Area were subjected to a robust, multidisciplinary screening process.

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64 (cont.)		<p>Ultimately, the other alternatives (besides the E1 Alternative) were eliminated from further study in the screening process and the Gila River Indian Community decided not to give permission to develop alternatives on its land (see Draft Environmental Impact Statement page 3-25). The E1 Alternative when combined with the W59, W71, and W101 (and its options) Alternatives in the Western Section represents three distinct action alternatives from project termini to project termini, and therefore, represents a full range of reasonable alternatives for detailed study in the Draft and Final Environmental Impact Statements.</p> <p>Therefore, the Arizona Department of Transportation, with concurrence from the Federal Highway Administration, identified the E1 Alternative as the eastern section of the Preferred Alternative (which includes the W59 Alternative in the Western Section of the Study Area). In reaching its determination, the Arizona Department of Transportation sought to balance its responsibilities to address regional mobility needs while being fiscally responsible and sensitive to local communities.</p> <p>As noted in text on page 3-54 of the Final Environmental Impact Statement, the Arizona Department of Transportation began acquiring land for the original alignment in 1988. Between 1988 and 2001, the Arizona Department of Transportation acquired approximately 293 acres. Most of this land (258 acres) is located in the Eastern Section along Pecos Road. In 2006, the Arizona Department of Transportation began protective and hardship land acquisition in the alignment right-of-way footprint for the W59 and E1 Alternatives. Between 2006 and October 2013, the Arizona Department of Transportation purchased 326 acres (303 in the Western Section and 23 in the Eastern Section). The process for hardship and advanced acquisitions is explained in text on page 4-50 of the Final Environmental Impact Statement.</p> <p>Advanced acquisitions in parallel to a National Environmental Policy Act environmental determination process is not unprecedented and is common practice. In this case, property acquisitions by the Arizona Department of Transportation for purposes of implementing the proposed action are done at risk as communicated to the agency by the Federal Highway Administration. If another action alternative were to be ultimately selected, the agency would likely have to place the acquired properties on the market for sale and purchase. The Arizona Department of Transportation attempts to balance the risk against its mission of timely delivery of transportation infrastructure to the driving public. Further, Federal Highway Administration regulations do not allow the ownership of right-of-way to be a factor in the decision regarding the selection of an alternative.</p>
	Tribal Involvement	<p>As noted in the previous comment response, the Draft Environmental Impact Statement on page 2-4 acknowledges that the Gila River Indian Community Council passed Resolution GR-64-96 that strongly opposed any future alignment of the South Mountain Freeway on Gila River Indian Community land. In addition, the comments received from Gila River Indian Community Governor Gregory Mendoza (see letter dated July 11, 2013, on page B38 in Appendix 7, Volume III, of the Final Environmental Impact Statement) confirm the Gila River Indian Community's position. Any alternative on Gila River Indian Community land must consider tribal sovereignty. Tribal sovereignty is based in the inherent authority of Native American tribes to govern themselves. While this notion of sovereignty is manifested in many areas, generally Native American land is held in trust by the United States. Native American communities have the authority to regulate land uses and activities on their lands. States have very limited authority over activities within tribal land (see page 2-1 of the Final Environmental Impact Statement). From a practical standpoint, this means that the Arizona Department of Transportation and Federal Highway Administration do not have the authority to survey tribal land, make land use (including transportation) determinations directly affecting tribal land, or condemn tribal land for public benefit through an eminent domain process.</p>

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65	<p>Mountain Loop. The DEIS does not make it clear why there were no other alternatives. Putting in the failed attempt with GRIC indicates there was a real assumption by ADOT that GRIC should have permitted the highway through its territory.²⁶² And because GRIC rejected the request, only one other option was available, and one that would also disparately impact the GRIC.²⁶³ By late 1998, ADOT had spent \$24 million on Pecos Road right of way. And now, ADOT says it owns about 85 percent of the land it needs along Pecos Road.²⁶⁴ From the facts, having a disparate effect on the GRIC, either by putting the South Mountain in the GRIC's reservation or through its sacred mountain has never been a deterrent in ADOT's plans.</p> <p>Regulations implementing NEPA explain that an EIS "shall briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives."²⁶⁵ And the Ninth Circuit has determined that agencies should be afforded considerable discretion in defining the purpose and need of a project.²⁶⁶ However, this discretion is not without limitations.²⁶⁷ For example, "an agency cannot define its objectives in unreasonably narrow terms."²⁶⁸ And "[a]n agency will not be permitted to narrow the objective of its action artificially and thereby circumvent the requirement that relevant alternatives be considered."²⁶⁹ Because there is no other alternative, the purpose and need for the proposed project is unreasonable.</p> <p>ADOT's Long Range Transportation Plan: 2010-2035, enumerates several goals and objectives for building transportation systems. They are: improve mobility and accessibility; preserve and maintain the system; support economic growth; link transportation and land use; consider natural, cultural, and environmental resources; enhance safety and security; strengthen partnerships; and promote fiscal stewardship. ADOT's Long Range Transportation Plan is seriously flawed by giving natural, cultural, and environmental resources only consideration; as</p>
66	<p>²⁶² After Governor Rhodes of the GRIC wrote a letter dated January 27, 2010 to ADOT's Director John Halikowski volunteering to allow a study of the effects of an On-Reservation Loop 2002 alignment in order "to mitigate any negative impacts to our culture and land" because "despite our desire for a no-build option, we recognize that there is a high likelihood that the Loop 2002 Mountain will be built", Governor Brewer of Arizona responded in a February 1, 2010 letter stating "I am hopeful for the opportunities that may exist to consider the economic development potential of this much-needed transportation corridor" and "I am pleased to know that your team is part of the conversation and that there is a path forward for ongoing talks about the conditions of the Community's cooperation." What is found in Governor Brewer's response is that Arizona is not interested in GRIC's values and needs but is only requesting that the GRIC "cooperate". (GRIC Executive Office of the Governor & Lieutenant Governor, January 27, 2010 letter to ADOT, John Halikowski; ADOT Governor, Feb. 1, 2010 letter to Governor William R. Rhodes, GRIC).</p> <p>²⁶³ ADOT spokesperson Tim Tait stated during the ADOT outreach in Komatke on June 22, 2013 that "A possible Gila River route will remain off the table unless the Community changes its stance either through a re-vote or Community Council action. If such a reversal occurs any time before the final record of decision on the freeway is reached in 2014, then an alternative Gila River alignment would be studied...As of now, there's no indication that that's changing, so the project team is moving ahead with the E1 alternative...That's the only thing that's on the table." (Joshua Jovanelly, GRIC Website, <i>ADOT outreach on proposed 202 ext. held in Komatke</i> http://www.gilariver.org/index.php/news/3829-adot-outreach-on-proposed-202-ext-held-in-komatke (last visited July 15, 2013).</p> <p>²⁶⁴ Sean Holstege, The Republic, <i>1998 plan for South Mountain Freeway passed</i>, March 25, 2013 http://www.azcentral.com/community/ahwatukee/articles/20130308south-mountain-freeway-plan-ignored.html (last visited July 11, 2013).</p> <p>²⁶⁵ 40 C.F.R. § 1502.13.</p> <p>²⁶⁶ Morrison, 153 F.3d at 1066.</p> <p>²⁶⁷ <i>Id.</i></p> <p>²⁶⁸ City of Carmel-By-The-Sea v. United States Dep't. of Transp., 123 F.3d 1142, 1155 (9th Cir.1997).</p> <p>²⁶⁹ See also City of New York v. United States Dep't of Transp., 715 F.2d 732, 743 (2d Cir.1983).</p>

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65	Purpose and Need	Chapter 1, <i>Purpose and Need</i> , of the Draft and Final Environmental Impact Statements examines the purpose and need for the proposed action in terms of defining a transportation problem. The results of the purpose and need analyses included the determination that a transportation problem (similar to the type of problem that has been represented in past Regional Transportation Plans) still exists in the area and that this problem is similar in characteristics to the transportation problem that existed in prior years. The alternatives analyses considered numerous modal alternatives, and it was concluded through the screening process that a road facility would best address the transportation problem defined. As concluded on page 3-26 of the Draft and Final Environmental Impact Statements, the process of alternatives development and screening demonstrated confirmation of the purpose and need as described in Chapter 1 of the Draft and Final Environmental Impact Statements and that the purpose and need allowed for meaningful consideration of a comprehensive set of alternatives including all substantial modes of transportation.
66	Environmental Impact Statement Process	The mission of the Arizona Department of Transportation to provide a safe, efficient, cost effective transportation system that links Arizona to the global economy, promotes economic prosperity, and demonstrates respect for Arizona's environment and quality of life is highlighted on page 1-3 of the Final Environmental Impact Statement. While it is the construct, operate, and maintain the state's transportation infrastructure, the agency is obligated to meet the requirements of the National Environmental Policy Act when federal funds are associated with its infrastructure. In complying with the law, the agency fully accounts for natural, cultural and environmental resources as disclosed in Chapters 3 and 4 of the Draft and Final Environmental Impact Statements. The process of preparing the Environmental Impact Statement was undertaken transparently and with full disclosure and embraced engagement by all stakeholders in the process as exemplified throughout Chapter 6 of the Draft and Final Environmental Impact Statements.
	Alternatives	In terms of fiscal stewardship, the cost comparisons referenced in the comment are not necessarily appropriate as economic conditions and material pricing was different dependent upon how long ago the referenced freeway segments were constructed. Regardless, the Arizona Department of Transportation seeks to balance its responsibilities to address regional mobility needs while being fiscally responsible and sensitive to local communities. For example, cost was an important factor in the alternatives screening process described in Chapter 3 of the Draft and Final Environmental Impact Statements and in terms of the Preferred Alternative presented in the Final Environmental Impact Statement, the Arizona Department of Transportation has continuously sought to identify and incorporate cost-saving measures in preliminary design, in part, for fiscal responsibility purposes.
	Hazardous Materials	The West Van Buren Water Quality Assurance Revolving Fund site was identified and considered during development of the Draft Environmental Impact Statement (see pages 4-97 and 4-153 of the Draft Environmental Impact Statement, and the Draft Initial Site Assessment prepared for the proposed project). These sites are primarily groundwater-impact sites, and groundwater is found at a depth of over 60 feet below the footprint of the Preferred Alternative. Given the separation distance between the adversely affected medium (groundwater) and the construction zone (near-surface in these locations), the project team determined

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67	<p>explained before, just considering significant cultural resources will limit federal funding. Further, in light of the goals and objectives, the South Mountain Loop 202 actually weakens partnerships, as the GRIC is a partner in transportation projects: marginalizing partners weakens, not strengthens partnerships. The South Mountain Loop 202 is also contrary to the promotion of fiscal stewardship. The South Mountain Highway will cost twice as much as any other highway that ADOT has built in the past: the 101 and the 202 loops cost about 40 to 46 million per mile. South Mountain would cost about 80 million per mile.²⁷⁰ The DEIS also fails to even include and therefore estimate the cost of the highly contaminated areas in the path of the proposed South Mountain Loop 202 that would have to be cleaned up for the highway to be put in.²⁷¹</p> <p>The South Mountain Loop 202 is neither legitimate and integral to ADOT’s mission nor is it necessary. The South Mountain Loop 202 would not be efficient or cost-effective. It would be more efficient to design a transportation mode that will strategically complement the realistic population projections, socioeconomic needs and current transportation modes to reign in urban sprawl and promote smart growth. It is not cost effective because it is going to be twice as much as other highway projects, 30 million of which would just be used to cover going through South Mountain. Having the highway through the ridges will require lots of maintenance, which will require ongoing costs.²⁷² Population growth, socioeconomic development and limits to current transportation modes do not bear a manifest demonstrable relationship to going through South Mountain. There are numerous ways to accommodate population growth, create smart growth and invest and improve in present transportation modes and public transportation without going through South Mountain. As PARC and others suggest, there are alternatives that are comparably effective with less of a disparate impact. Therefore, there is no substantial legitimate justification for the disparate impact on the GRIC.</p> <p>If ADOT wants to fulfill the purpose and need of reducing congestion and traffic and at the same time, follow the Arizona Transportation Plan, several alternatives offered by PARC are feasible: (1) Light rail along Pecos Road but going through a small portion of the GRIC (with permission) rather than cutting through South Mountain; (2) 8-10 lane Loop 202 following Baseline Road from 51st Ave to I-10; (3) 8-10 lane Loop 202 from I-10 near Avondale going along the west side of the Estrella Mountains and then cutting between the Estrella and Maricopa Mountains, following the southern boundary of the GRIC to the I-10 north of Casa Grande; (4) 8-10 lane freeway along State Route 85 from I-10 at Buckeye to I-8 at Gila Bend as a “real” truck by-pass; (5) 8-10 lane freeway along State Route 85 from I-10 at Buckeye, cutting between the Estrella and Maricopa Mountains and across to I-10 north of Casa Grande as a “real” truck</p> <p>²⁷⁰ Jana Bommersbach, <i>Road Rage “Jana’s View”</i> Phoenix Magazine February 2007 quoting Eric Anderson of MAG http://www.janabommersbach.com/phx-mag-feb07.php (last visited July 1, 2013).</p> <p>²⁷¹ The proposed path of the freeway crosses contaminated property near Interstate 10 near 55th Avenue. Also, groundwater is contaminated with tetrachloroethene (PCE), trichloroethene (TCE), 1,1-dichloroethane (1,1-DCA), cis-1,2-dichloroethene (cis-1,2-DCE), 1,1-dichloroethene(1,1-DCE) and chromium in the area around 51st avenue and Van Buren to 59th Avenue and Van Buren: the area is on the list of the state of Arizona’s Water Quality Assurance Revolving Fund (WQARF), which is the state’s equivalent of a Superfund Site. (AZDEQ, <i>West Van Buren Water Quality Assurance Revolving Fund (WQARF) Site</i>, found at http://www.azdeq.gov/enviro/waste/sps/download/phoenix/wvb.pdf) By purchasing this contaminated land for the freeway, the state of Arizona would have to assume the liability for the clean-up of these contaminants, along with the liability for adverse health impacts suffered by workers in the area. This would be an enormous economic impact.</p> <p>²⁷² FHWA does not provide funding for continued maintenance of hillside erosion after construction. ADOT does not provide its maintenance highway workers funding to mitigate sediment discharges from hillside rills and failed sediment control features of the original construction best management practices.</p>

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66 (cont.)		<p>that these sites would not pose a risk to construction or to the general public once the facility were completed. This assessment has been clarified in the Final Environmental Impact Statement on page 4-165.</p> <p>Given the separation distance between the adversely affected media (groundwater) and the construction zone (near surface in this location), the project team determined that this site would not pose a risk to construction or to the general public once the facility were completed.</p>
67	Mission, Alternatives	<p>The section, <i>Context of the Proposed Action Relative to the ADOT Mission</i>, beginning on page 1-3 of the Final Environmental Impact Statement describes the direct and appropriate application of the implementation of the proposed action to the agency mission.</p> <p>In accordance with the National Environmental Policy Act, a range of reasonable action alternatives to carry forward for detailed study was determined through application of multidisciplinary criteria in a logical, step-wise progression. Alternatives were not disposed of or dismissed without a thorough evaluation using the multidisciplinary criteria outlined in the alternatives development and screening process presented in Chapter 3, <i>Alternatives</i>, of the Draft and Final Environmental Impact Statements. The criteria, in general terms, considered operations, design, ability to meet purpose and need, environmental considerations, cost, and acceptability. The preferred alternative was the outcome to this process. As described therein, a comprehensive set of modal transportation (such as light rail) and non-transportation alternatives (such as a land use based alternative) were subjected to the evaluation process (these alternatives included many of the specific alternatives referenced in the comment). Reasons for elimination of those alternatives are summarized in Table 3-2 of the Final Environmental Impact Statement. Results of the process are concluded on page 3-26 of the Final Environmental Impact Statement. According to 23 Code of Federal Regulations §771.111(f),” the action evaluated in the environmental impact statement must connect logical termini and be of sufficient length to address environmental matters on a broad scope...”. The proposed action should satisfy the project need and should be considered in the context of the local area socioeconomics and topography, the future travel demand, and other infrastructure improvements in the area. A partial freeway from Interstate 10 (Papago Freeway) to Laveen Village is not feasible because it would not meet the proposed freeway’s identified purpose and need.</p> <p>When analyzing purpose and need and in consideration of alternatives, improvements to the operations of Interstate 10 through the Phoenix metropolitan area as considered in the Maricopa Association of Governments’ Long Range Transportation Plan were accounted for a part of the baseline conditions.</p>

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68	<p>by-pass; (6) 8-10 lane freeway along one of the routes described in 2, 3, or 4, and renumber it as the I-10 so all “through” traffic would take this route as a default; (7) Renumber the I-10 through Phoenix as I-810 or the like, making it obvious that it is for Phoenix traffic only.²⁷³ Additional alternatives are improve the Broadway Curve by applying good engineering directly to the interchanges in that area; build a road to help Laveen traffic reach I-10 West, much as Pecos Road helps Ahwatukee reach I-10 East; and improve SR 85 to a freeway and renumber the truck bypass I-10 to better facilitate and encourage all pass-through traffic to travel around the valley instead of through it.</p> <p>Further, just by applying smart technology on existing highway, infrastructure projects would look entirely different. For example, traffic planners know solutions to ameliorate congestion that could be applied to the Phoenix-metropolitan area.²⁷⁴ For example, simple partial solution is a toll-free 511 traffic telephone system.²⁷⁵ Another technology is based on a network of freeway cameras and sensors that would measure and monitor the amount of traffic and predict how long a journey will take: information then could be fed to mobile devices and the electronic message signs on freeways that tell motorists how long it will take to reach certain intersections.²⁷⁶ Highway signs could also give alerts of traffic jams miles in advance and advise people to take detours.²⁷⁷ The signs could also signal lane closures miles before cars approach a bottleneck.²⁷⁸ Also, some carpool lanes might be better off converted back into regular lanes.²⁷⁹ And, more signs urging slow traffic to stay to the right could also relieve congestion.²⁸⁰</p> <p>VIII. REMEDIES</p> <p>For all the reasons above, ADOT violated Title VI of the Civil Rights Act by engaging in discrimination based on race, ethnic identification, and nationality.</p> <p>In order to provide effective remedies for the discrimination set forth in this Complaint, ADOT must:</p> <p>(1) exclude any route for the proposed freeway that would go near or through the South Mountain or GRIC or other sites considered sacred or culturally significant to indigenous people;</p> <p>(2) adopt an environmental justice policy that will ensure compliance with Title VI for all current and future projects;</p> <p>(3) and prohibit future federal funding to ADOT if the South Mountain Loop 202 is built.</p> <p>Submitted by: Lori Riddle</p> <p>on behalf of the Gila River Alliance for a Clean Environment</p> <p>²⁷³ PARC, Possible Alternatives to SMF, http://74.53.100.109/~protecto/?page_id=31(last visited June 29, 2013).</p> <p>²⁷⁴ <i>Id.</i></p> <p>²⁷⁵ <i>Id.</i></p> <p>²⁷⁶ <i>Id.</i></p> <p>²⁷⁷ <i>Id.</i></p> <p>²⁷⁸ <i>Id.</i></p> <p>²⁷⁹ <i>Id.</i></p> <p>²⁸⁰ Sean Holstege, The Republic, <i>New report details Phoenix-area's traffic congestion</i> Feb 4, 2013 http://www.azcentral.com/news/articles/20130131phoenix-area-new-report-details-traffic-congestion.html (last visited July, 9 2013).</p>
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67 (cont.)	Water Resources	<p>As noted on page 4-102 of the Final Environmental Impact Statement, storm water flows and related erosion from excavated areas would be addressed by implementation of a Stormwater Pollution Prevention Plan and related best practices. Stormwater Pollution Prevention Plans are required on Arizona Department of Transportation construction projects to control and mitigate erosion and loss of soil from the project and off-site movement of eroded sediments.</p> <p>During construction, off-site impacts to soil from erosion related to the freeway construction project are not expected. Implementation of the Stormwater Pollution Prevention Plan and related best practices would keep eroded sediments on-site for collection and replacement as appropriate. After construction, grading and drainage and landscape design components of the freeway system would act to control and mitigate erosion.</p>
	Truck Traffic	<p>Creating a truck bypass is not a goal of the proposed action. The proposed freeway is part of a transportation system developed to improve mobility in the region by increasing capacity and allowing traffic—including truck traffic—to access a segment of the “loop” system (see pages 1-21, 1-22, 3-1, and 3-3 of the Final Environmental Impact Statement) in the Phoenix metropolitan area. The proposed South Mountain Freeway would be a commuter corridor, helping to move local traffic. As with all other freeways in the region, trucks would use it for the through-transport of freight, for transport to and from distribution centers, and for transport to support local commerce. Nevertheless, the primary vehicles using the proposed freeway would be automobiles. The Maricopa Association of Governments regional travel demand model projects that truck traffic would represent approximately 10 percent of the total traffic on the proposed freeway, similar to what is currently experienced on other regional freeways such as Interstate 10, State Route 101L, and U.S. Route 60. As disclosed in the Final Environmental Impact Statement, it is expected that “true” through-truck traffic (not having to stop in the metropolitan area) would continue to use the faster, designated, and posted bypass system of Interstate 8 and State Route 85 (see page 3-64 of the Final Environmental Impact Statement).</p>
	Alternatives	<p>According to 23 Code of Federal Regulations §771.111(f),” the action evaluated in the environmental impact statement must connect logical termini and be of sufficient length to address environmental matters on a broad scope...”. The proposed action should satisfy the project need and should be considered in the context of the local area socioeconomics and topography, the future travel demand, and other infrastructure improvements in the area. A partial freeway from Interstate 10 (Papago Freeway) to Laveen Village is not feasible because it would not meet the proposed freeway’s identified purpose and need.</p> <p>All of the alternatives reflected in the comment were accounted for in the logical, sequential, step-by-step systematic, interdisciplinary approach to developing and screening alternatives as presented in Chapter 3, <i>Alternatives</i>, of the Draft and Final Environmental Impact Statements. Each was subjected to equal consideration in the screening process and reasons for elimination can be found in that chapter.</p>

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	<p>P.O. Box 11217 Bapchule Az 85121 529-610-3405 contaminatedinaz@yahoo.com</p> <p>Please send all communications via mail or email.</p>

Code	Issue	Response
68	Alternatives	As discussed on page 3-3 of the Draft and Final Environmental Impact Statements, the project team considered a wide range of modal alternatives to improve transportation conditions in the Study Area such as transportation system management (maximizing the efficiency of existing transportation facilities) and transportation demand management (reducing demand on existing transportation facilities); however, these and other nonfreeway alternatives were eliminated from further study; chiefly, they did not support criteria related to transportation demand and capacity deficiencies. Transportation system management and transportation demand management strategies are included in the <i>Regional Transportation Plan</i> and these strategies will continue to be implemented throughout Maricopa County. These include the use of ramp metering; overhead, automated, advanced warning signs; freeway cameras for monitoring traffic flow/ and other intelligent transportation system technology to enhance operational characteristics; ride share programs; Maricopa County Trip Reduction Program; and van pool programs. As noted in Table 3-2 on page 3-5 of the Draft and Final Environmental Impact Statements, elimination of technological alternatives (transportation system management and transportation demand management) as distinct alternatives would not preclude the use of elements of these in combination with the freeway mode. This is further described on page 3-58 of the Final Environmental Impact Statement.
69	Title VI	Since the beginning of the environmental impact statement process, the Federal Highway Administration and Arizona Department of Transportation have been carrying out cultural resources studies and engaging in ongoing, open consultation with the Gila River Indian Community Tribal Historic Preservation Office regarding the identification and evaluation of places of religious and cultural importance to the tribe that may be adversely affected by the proposed freeway. Such places are referred to as traditional cultural properties. As a result of these discussions and of studies conducted by the Gila River Indian Community's Cultural Resource Management Program, the Gila River Indian Community has identified traditional cultural properties that are eligible for listing in the National Register of Historic Places and that could be affected by construction of the proposed freeway. In certain cases, listing these properties on the National Register of Historic Places may offer them protection under Section 4(f) of the Department of Transportation Act. The traditional cultural properties identified are culturally important to other Native American tribes as well. For more discussion of traditional cultural properties, see the section, <i>Cultural Resources</i> , beginning on page 4-140 of the Final Environmental Impact Statement and pages 5-26 through 5-28.

Code	Comment Document
70	<div><p></p><p><i>Gila River Alliance for a Clean Environment (GRACE)</i></p><p>EMBARGO UNTIL 7 AM TUESDAY JULY 30, 2013 Contact: Lori Riddle 520-610-3405, Joseph Moraga 520-610-8027</p><p>GILA RIVER INDIAN COMMUNITY TRIBAL MEMBERS TO SERVE ARIZONA DEPARTMENT OF TRANSPORTATION WITH FEDERAL TITLE VI CIVIL RIGHTS COMPLAINT FOR ADOT'S PROPOSED BLASTING OF SACRED SOUTH MOUNTAIN AND DESECRATION OF SACRED SITES IF SOUTH MOUNTAIN LOOP 202 FREEWAY IS BUILT</p><p>PRESS CONFERENCE AND SERVING ADOT WITH CIVIL RIGHTS COMPLAINT: TUESDAY, JULY 30, 2013 9 AM IN FRONT OF ARIZONA DEPARTMENT OF TRANSPORTATION 206 S. 17th AVE., PHOENIX, ARIZONA</p><p>Phoenix, AZ. — Gila River Indian Community tribal members and their community group the Gila River Alliance for a Clean Environment will have a press conference on Tuesday, July 30, 2013 at 9 am to announce that they have filed a federal civil rights complaint under Title VI of the United States Civil Rights Act against the Arizona Department of Transportation. The press conference will take place in front of ADOT, 206 S. 17th AVE., Phoenix, Arizona.</p><p>Following the press conference, tribal members with the Gila River Alliance for a Clean Environment will serve ADOT with a copy of the civil rights complaint.</p><p>The civil rights complaint alleges that ADOT violated the civil rights of Native peoples of the Gila River Indian Community by proposing and promoting the South Mountain Loop 202 Freeway that would negatively and disparately impact Gila River Indian Community tribal members by desecrating their sacred South Mountain and causing disparate health impacts. The complaint is being filed with the United States Department of Transportation, as ADOT is a recipient of funds from the US DOT/Federal Highway Administration and is subject to the non-discrimination provisions of Title VI.</p><p>Title VI states that "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." Tribal members, a protected class of people, were discriminated against because:</p><ul style="list-style-type: none">• ADOT knowingly and purposely designed the South Mountain Loop 202 through the GRIC's sacred South Mountain, despite recognizing and acknowledging that the South Mountain Loop 202 would have a serious and major disparate impact on tribal members culturally, spiritually, and religiously;• ADOT purposely designed a narrow purpose and need for the DEIS based on inaccurate and false estimates of population projections and users of the South Mountain Loop 202 Freeway, narrow assumptions of potential alternative transportation modalities, and ignored the environmental and sociological consequences of creating more freeway rather than moving toward smart growth, eliminating any alternative that would not have a disparate and a negative cumulative effect on the Gila River Indian Community and its people;• ADOT failed to analyze the South Mountain Loop 202's disparate health, environmental, and economic impacts on the tribe and tribal members who already experience higher rates of diabetes and asthma that would be exacerbated if the South Mountain Loop 202 were constructed;• ADOT provided inadequate consultation and informed consent, access, notice, and meaningful participation in the Draft Environmental Impact Statement scoping and planning to the Gila River Indian Community tribal members.<p>The civil rights complaint requests that the federal government cease all further funding to ADOT if the South Mountain Loop 202 project is built due to the devastating cultural, spiritual and health impacts on tribal members that would unacceptably and illegally violate civil rights of tribal members.</p><p>In addition, the Gila River Alliance for a Clean Environment will be filing international complaints with UN Special Rapporteurs on human rights and fundamental freedoms of indigenous people, cultural rights, and freedom of religion.</p></div>

Code	Issue	Response
69 (cont.)		<p>Section 106 of the National Historic Preservation Act requires a government-to-government relationship between the Federal Government and Indian tribes as described beginning on page 4-140 of the Final Environmental Impact Statement. Section 106 requires that federal agencies take into account the effects of their undertakings on historic properties. This process requires consultation with tribal authorities. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. The consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Register of Historic Places eligibility recommendations (including traditional cultural properties), project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.</p> <p>The Draft Environmental Impact Statement, after consultation and coordination efforts, accommodates and preserves (to the fullest extent possible from the available alternatives) access to the South Mountains for religious practices. A very small portion of the mountain would be impacted by the proposed freeway (less than 0.03 percent of the total area). Although the Draft Environmental Impact Statement describes the impact on the South Mountains as adverse, Native Americans would not be kept from practicing their beliefs, access to the mountain would be maintained, and mitigation measures would be implemented based on input from members of the Gila River Indian Community.</p>
70	Title VI	<p>All comments made in the attached press release have been addressed in the complaint letter above.</p>

Code	Issue	Response

Code Comment Document

RECEIVED
JUL 30 2013

Gila River Alliance for a Clean Environment (GRACE)

BY: BIE

EMBARGO UNTIL 7 AM TUESDAY JULY 30, 2013 Contact: Lori Riddle 520-610-3405; Joseph Moraga 520-610-8027

**GILA RIVER INDIAN COMMUNITY TRIBAL MEMBERS TO SERVE ARIZONA DEPARTMENT OF TRANSPORTATION
WITH FEDERAL TITLE VI CIVIL RIGHTS COMPLAINT
FOR ADOT'S PROPOSED BLASTING OF SACRED SOUTH MOUNTAIN AND DESECRATION OF SACRED SITES
IF SOUTH MOUNTAIN LOOP 202 FREEWAY IS BUILT**

**PRESS CONFERENCE AND SERVING ADOT WITH CIVIL RIGHTS COMPLAINT:
TUESDAY, JULY 30, 2013 9 AM
IN FRONT OF ARIZONA DEPARTMENT OF TRANSPORTATION 206 S. 17th AVE., PHOENIX, ARIZONA**

Phoenix, AZ. – Gila River Indian Community tribal members and their community group the Gila River Alliance for a Clean Environment will have a press conference on Tuesday, July 30, 2013 at 9 am to announce that they have filed a federal civil rights complaint under Title VI of the United States Civil Rights Act against the Arizona Department of Transportation. The press conference will take place in front of ADOT, 206 S. 17th AVE., Phoenix, Arizona.

Following the press conference, tribal members with the Gila River Alliance for a Clean Environment will serve ADOT with a copy of the civil rights complaint.

The civil rights complaint alleges that ADOT violated the civil rights of Native peoples of the Gila River Indian Community by proposing and promoting the South Mountain Loop 202 Freeway that would negatively and disparately impact Gila River Indian Community tribal members by desecrating their sacred South Mountain and causing disparate health impacts. The complaint is being filed with the United States Department of Transportation, as ADOT is a recipient of funds from the US DOT/Federal Highway Administration and is subject to the non-discrimination provisions of Title VI.

Title VI states that "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." Tribal members, a protected class of people, were discriminated against because

- ADOT knowingly and purposely designed the South Mountain Loop 202 through the GRIC's sacred South Mountain, despite recognizing and acknowledging that the South Mountain Loop 202 would have a serious and major disparate impact on tribal members culturally, spiritually, and religiously;
- ADOT purposely designed a narrow purpose and need for the DEIS based on inaccurate and false estimates of population projections and users of the South Mountain Loop 202 Freeway, narrow assumptions of potential alternative transportation modalities, and ignored the environmental and sociological consequences of creating more freeway rather than moving toward smart growth, eliminating any alternative that would not have a disparate and a negative cumulative effect on the Gila River Indian Community and its people;
- ADOT failed to analyze the South Mountain Loop 202's disparate health, environmental, and economic impacts on the tribe and tribal members who already experience higher rates of diabetes and asthma that would be exacerbated if the South Mountain Loop 202 were constructed;
- ADOT provided inadequate consultation and informed consent, access, notice, and meaningful participation in the Draft Environmental Impact Statement scoping and planning to the Gila River Indian Community tribal members.

The civil rights complaint requests that the federal government cease all further funding to ADOT if the South Mountain Loop 202 project is built due to the devastating cultural, spiritual and health impacts on tribal members that would unacceptably and illegally violate civil rights of tribal members.

In addition, the Gila River Alliance for a Clean Environment will be filing international complaints with UN Special Rapporteurs on human rights and fundamental freedoms of indigenous people, cultural rights, and freedom of religion.

Code	Issue	Response

Code Comment Document

The seal of the Gila River Indian Community, featuring a circular design with a mountain, river, and sun, and the text "GILA RIVER INDIAN COMMUNITY" and "1835".

GILA RIVER INDIAN COMMUNITY

SACATON, AZ 85247

CULTURAL RESOURCE MANAGEMENT PROGRAM
CULTURAL RESOURCE SPECIALIST OFFICE

POST OFFICE BOX 2140
(520) 562-3570
(520) 562-3571
FAX: (520) 562-3576

MEMORANDUM

TO: Jennifer Giff, GRIC General Counsel

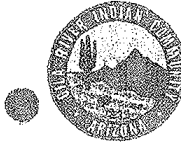
FROM: Barnaby V. Lewis, CRMP Cultural Resource Specialist *BV*

DATE: March 26, 2007

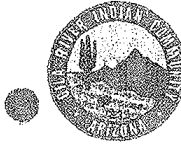
SUBJECT: RESOLUTION DESIGNATING THE SOUTH MOUNTAIN RANGE
(Muhadag, Avikwaxois) AS A SACRED PLACE AND TRADITIONAL
CULTURAL PROPERTY OF THE GILA RIVER INDIAN
COMMUNITY.

Attached is a draft resolution designating the South Mountain Range as a sacred place and traditional cultural property for your review. We wish to proceed in presenting this resolution before GRIC Cultural Resource Standing Committee at the next regular meeting on Tuesday, March 27, 2007. Thank you for your attention in this review. Please call me at 562-6713 or Assistant Cultural Resource Specialist, Angela D. Garcia-Lewis at 562-6743 if you have any questions.

Code	Issue	Response
71		Comment noted. Gila River Indian Community Resolution Designating the South Mountain Range as a Sacred Place and Traditional Cultural Property

Code	Comment Document
72	<div><div>GILA RIVER INDIAN COMMUNITY</div><div>SACATON, AZ 85247</div></div> <p>RESOLUTION NO. GR-41-07</p> <p>A RESOLUTION DESIGNATING THE SOUTH MOUNTAIN RANGE (<i>Muhadag, Avikwaxós</i>) AS A SACRED PLACE AND TRADITIONAL CULTURAL PROPERTY OF THE GILA RIVER INDIAN COMMUNITY.</p> <p>WHEREAS, the Gila River Indian Community Council (“the Community Council”) is the governing body of the Gila River Indian Community (“the Community”); and</p> <p>WHEREAS, the Community Council on January 6, 1982, did adopt Ordinance No. GR-01-82 under Title XV of the Gila River Indian Community Law and Order Code in which “[i]t is...declared as a matter of Community policy and legislative determination, that the public interests of the Pima-Maricopa people and the interests of all other persons living within the jurisdiction of the Gila River Indian Community require that the Community adopt a means whereby all sites, location, structures, and objects of sacred, historical or scientific interest or nature will be protected from desecration, destruction, theft, or other interference.”; and</p> <p>WHEREAS, the Community Council through Resolution GR-15-89 did approve the Policy Statement of the Four Southern Tribes (Salt River Pima-Maricopa Indian Community, Ak Chin Indian Community, Tohono O’odham Nation, and the Gila River Indian Community) which outlines the Four Tribes intent to protect, promote, and preserve cultural affinity to the HuHuKam; and</p> <p>WHEREAS, the Community Council has always held the preservation of historical, archaeological, cultural, religious sites as a high priority and recognizes the need to protect the cultural heritages of the Akimel O’Odham (Pima) and the Pee Posh (Maricopa); and</p> <p>WHEREAS, the identification and authentication of sacred places / traditional cultural properties is the sole responsibility of the federally recognized tribe according to its unique culture; and</p> <p>WHEREAS, the Community does recognize certain locations to be sacred places / traditional cultural properties based on the unique cultural and spiritual beliefs of the Akimel O’Odham (Pima) and the Pee Posh (Maricopa); and</p>

Code	Issue	Response
72		Comment noted. Gila River Indian Community Resolution Designating the South Mountain Range as a Sacred Place and Traditional Cultural Property

Code	Comment Document
	<div><div>GILA RIVER INDIAN COMMUNITY</div><div>SACATON, AZ 85247</div></div> <div>RESOLUTION NO. GR-41-07</div> <div>A RESOLUTION DESIGNATING THE SOUTH MOUNTAIN RANGE (<i>Muhadag, Avikwaxós</i>) AS A SACRED PLACE AND TRADITIONAL CULTURAL PROPERTY OF THE GILA RIVER INDIAN COMMUNITY.</div> <div>WHEREAS, the Gila River Indian Community Council (“the Community Council”) is the governing body of the Gila River Indian Community (“the Community”); and</div> <div>WHEREAS, the Community Council on January 6, 1982, did adopt Ordinance No. GR-01-82 under Title XV of the Gila River Indian Community Law and Order Code in which “[i]t is...declared as a matter of Community policy and legislative determination, that the public interests of the Pima-Maricopa people and the interests of all other persons living within the jurisdiction of the Gila River Indian Community require that the Community adopt a means whereby all sites, location, structures, and objects of sacred, historical or scientific interest or nature will be protected from desecration, destruction, theft, or other interference.”; and</div> <div>WHEREAS, the Community Council through Resolution GR-15-89 did approve the Policy Statement of the Four Southern Tribes (Salt River Pima-Maricopa Indian Community, Ak Chin Indian Community, Tohono O’odham Nation, and the Gila River Indian Community) which outlines the Four Tribes intent to protect, promote, and preserve cultural affinity to the HuHuKam; and</div> <div>WHEREAS, the Community Council has always held the preservation of historical, archaeological, cultural, religious sites as a high priority and recognizes the need to protect the cultural heritages of the Akimel O’Odham (Pima) and the Pee Posh (Maricopa); and</div> <div>WHEREAS, the identification and authentication of sacred places / traditional cultural properties is the sole responsibility of the federally recognized tribe according to its unique culture; and</div> <div>WHEREAS, the Community does recognize certain locations to be sacred places / traditional cultural properties based on the unique cultural and spiritual beliefs of the Akimel O’Odham (Pima) and the Pee Posh (Maricopa); and</div>


Code	Issue	Response

Code	Comment Document
	<div><p>GILA RIVER INDIAN COMMUNITY RESOLUTION GR-41-07 PAGE 2 OF 2</p><p>WHEREAS, all, but not limited to, of the places referenced in the oral traditions of the Akimel O’Odham (Pima) and the Pee Posh (Maricopa) are culturally and spiritually significant to the continuing life ways of the Akimel O’Odham (Pima) and the Pee Posh (Maricopa); and</p><p>WHEREAS, the <i>Muhadag</i> (Pima language) also known as (a.k.a.) <i>Avikwaxós</i> (Maricopa language), a.k.a. Greasy Mountain (English language), and geographically known as the South Mountain, South Mountain Range, or Salt River Mountains (Range) figures prominently in oral traditions of both the Akimel O’Odham (Pima) and the Pee Posh (Maricopa)</p><p>NOW THEREFORE BE IT RESOLVED, that the Community Council hereby does acknowledge and recognize that the South Mountain Range in its entirety is a sacred place / traditional cultural property and must be kept inviolate.</p><p>BE IT FURTHER RESOLVED, that the Community Council hereby strongly opposes any alteration of the South Mountain Range for any purpose would be a violation of the cultural and religious beliefs of the Gila River Indian Community and would have a negative cumulative affect on the continuing lifeways of the people of the Gila River Indian Community.</p><p>BE IT FINALLY RESOLVED, that the Governor, or in his absence, the Lieutenant Governor, is hereby authorized to sign and execute such documents as are necessary to effectuate this resolution.</p><p>CERTIFICATION</p><p>Pursuant to authority contained in Article XV, Section 1, (a) (7), (9), (18), and Section 4 of the amended Constitution and Bylaws of the Gila River Indian Community, ratified by the Tribe January 22, 1960, and approved by the Secretary of the Interior on March 17, 1960, the foregoing Resolution was adopted on the 4th of <u>April, 2007</u>, at a Regular Community Council Meeting held in <u>District 3, Sacaton, Arizona</u> at which a quorum of <u>10</u> Members were present by a vote of: <u>2</u> FOR; <u>0</u> OPPOSE; <u>1</u> ABSTAIN; <u>5</u> ABSENT; <u>2</u> VACANCIES.</p><p>GILA RIVER INDIAN COMMUNITY</p><p><u>L.R. Pelt 4-10-07</u> GOVERNOR</p><p>ATTEST:</p><p><u>Amber J. Stewart</u> COMMUNITY COUNCIL SECRETARY</p></div>

Code	Issue	Response

Code	Comment Document
	<p>GILA RIVER INDIAN COMMUNITY RESOLUTION GR-41-07 PAGE 2 OF 2</p> <p>WHEREAS, all, but not limited to, of the places referenced in the oral traditions of the Akimel O’Odham (Pima) and the Pee Posh (Maricopa) are culturally and spiritually significant to the continuing life ways of the Akimel O’Odham (Pima) and the Pee Posh (Maricopa); and</p> <p>WHEREAS, the <i>Muhadag</i> (Pima language) also known as (a.k.a.) <i>Avikwaxós</i> (Maricopa language), a.k.a. Greasy Mountain (English language), and geographically known as the South Mountain, South Mountain Range, or Salt River Mountains (Range) figures prominently in oral traditions of both the Akimel O’Odham (Pima) and the Pee Posh (Maricopa)</p> <p>NOW THEREFORE BE IT RESOLVED, that the Community Council hereby does acknowledge and recognize that the South Mountain Range in its entirety is a sacred place / traditional cultural property and must be kept inviolate.</p> <p>BE IT FURTHER RESOLVED, that the Community Council hereby strongly opposes any alteration of the South Mountain Range for any purpose would be a violation of the cultural and religious beliefs of the Gila River Indian Community and would have a negative cumulative affect on the continuing lifeways of the people of the Gila River Indian Community.</p> <p>BE IT FINALLY RESOLVED, that the Governor, or in his absence, the Lieutenant Governor, is hereby authorized to sign and execute such documents as are necessary to effectuate this resolution.</p> <p>CERTIFICATION</p> <p>Pursuant to authority contained in Article XV, Section 1, (a) (7), (9), (18), and Section 4 of the amended Constitution and Bylaws of the Gila River Indian Community, ratified by the Tribe January 22, 1960, and approved by the Secretary of the Interior on March 17, 1960, the foregoing Resolution was adopted on the 4th of <u>April, 2007</u>, at a Regular Community Council Meeting held in <u>District 3, Sacaton, Arizona</u> at which a quorum of <u>10</u> Members were present by a vote of: <u>2</u> FOR; <u>0</u> OPPOSE; <u>1</u> ABSTAIN; <u>5</u> ABSENT; <u>2</u> VACANCIES.</p> <p>GILA RIVER INDIAN COMMUNITY</p> <p><u>L. R. Pelt 4-10-07</u> GOVERNOR</p> <p>ATTEST:</p> <p><u>Annun J. Stewart</u> COMMUNITY COUNCIL SECRETARY</p>

Code	Issue	Response

Code	Comment Document
73	<div><div></div><div><div>GILA RIVER INDIAN COMMUNITY</div><div>SACATON, AZ 85247</div></div></div> <div>RESOLUTION GR-126-00</div> <div>RESOLUTION OPPOSING THE USE OF 51ST AVENUE FOR THE PROPOSED TRUCK BYPASS ROUTE AND ANY FUTURE BYPASS PLANS FOR THE PROPOSED SOUTH MOUNTAIN PARKWAY THROUGH THE DISTRICT SIX COMMUNITY OF THE GILA RIVER INDIAN COMMUNITY</div> <div><p>WHEREAS, the Maricopa County Department of Transportation (the “MCDOT”) completed a 51st Avenue Corridor Truck Route Analysis Study that projected traffic volumes of 7,000 vehicles per day on 51st Avenue in 1997 with volumes projected to increase to 23,000 vehicles per day by the year 2020;</p><p>WHEREAS, MCDOT has proposed a truck bypass route that would redirect traffic and reduce current and future congestion on 51st Avenue in Laveen;</p><p>WHEREAS, the City of Phoenix completed a South Mountain Parkway Specific Plan in 1999 to address the limited access to the west valley from Interstate 10 east;</p><p>WHEREAS, the Maricopa Association of Governments (the “MAG”) has formed a South Mountain Agency Stakeholders group for the purpose of developing a recommendation for the alignment for the proposed South Mountain Parkway;</p><p>WHEREAS, the Arizona Department of Transportation (the “ADOT”), MCDOT, City of Phoenix, and MAG plan on extending Pecos Road west around the South Mountain with an option of crossing across lands of the Gila River Indian Community (the “Community”);</p><p>WHEREAS, the District Six community has experienced the negative impact of increasing traffic through the residential areas along 51st Avenue south of the Community’s boundary;</p><p>WHEREAS, 51st Avenue is essential to the Community because it serves as the principal arterial from Riggs Road-Beltline road and is a significant east/west travel route to the western portion of the Community;</p><p>WHEREAS, the District Six Community is concerned with the safety and welfare of its members, as well as other members of the Community who utilize this roadway, due to excessively speeding vehicles on 51st Avenue, which has residential areas, churches, a health clinic, a school, a Boys and Girls club, and a convenience store within its area;</p></div>

Code	Issue	Response
73	Alternatives	Comment noted. Gila River Indian Community Resolution Opposing the South Mountain Freeway through District Six and on 51st Avenue

Code

Comment Document

GILA RIVER INDIAN COMMUNITY
RESOLUTION GR-126-00
PAGE 2

WHEREAS, the District Six Community has concerns of increasing traffic, excess speeding vehicles, the safety and welfare of its members, the area's significant cultural and religious importance to the entire Community, the deterioration of the pristine natural environment, and the increase negative noise and visual impacts;

WHEREAS, because of its concerns, the District Six Community strongly opposes the proposed parkway, truck bypass route, or any future bypass plans through portions of the South Mountain and across Community land;

WHEREAS, on June 12, 2000, the District Six Community voted to strongly oppose future transportation of hazardous waste and materials through its community; and

WHEREAS, the District Six Community strongly requests that the Community Council oppose any future development of roadways from ADOT and MCDOT through the District Six Community.

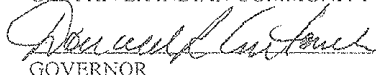
NOW THEREFORE BE IT RESOLVED, that the Community Council strongly opposes the development plans by ADOT, MCDOT, and MAG for a truck bypass route or any future bypass plans for the proposed South Mountain Parkway across Community lands.

BE IT FINALLY RESOLVED, that the Governor, or in the Governor's absence the Lieutenant Governor, is hereby authorized to take necessary action to effectuate the intent of this Resolution.


CERTIFICATION

Pursuant to authority contained in Article XV, Section 1, (a), (1), (7), (9) and Section 4 of the amended Constitution and Bylaws of the Gila River Indian Community, ratified by the Tribe January 22, 1960 and approved by the Secretary of the Interior on March 17, 1960, the foregoing Resolution was adopted by this 2nd day of August, 2000 at a Regular Community Council Meeting held in District 3, Sacaton, AZ at which a quorum of 15 Members were present by a vote of 15 FOR; 0 OPPOSE; 0 ABSTAIN; 2 ABSENT; 0 VACANCY.

GILA RIVER INDIAN COMMUNITY


GOVERNOR

ATTEST


COMMUNITY COUNCIL SECRETARY

Code	Issue	Response

Code Comment Document

**Elderly Concerns Group
Motion Sheet**

Date: June 12, 2013

Ms. Sharon Gonzales, District Seven Elder, made a motion that we as elders oppose
The Free way project and to keep them from destroying South Mountain.

The motion was seconded by: Mr. Fred Reams, District Three Elder.

Motion approved on this 12th day of June 2013 by a majority show

Of hands from the group.


Sandra Jackson
Secretary's Signature

6/27/13
Date

Mary V. Thomas
Chairperson's Signature

6-27-13
Date

Code	Issue	Response
74		Comment noted.

Code	Comment Document
75	<p>July 2, 2013</p> <p>I, Winnona Catha am a community member of the Gila River Indian Reservation. My connection to the South Mountain is that it is a sacred mountain to our people. Also, it was most sacred to our ancestors.</p> <p>There are many things that the mountain was used for such as ceremonies, there are stories about that mountain I was told by my elders, and there are plants that grow on this mountain that we use today for healing, eating, and blessings.</p> <p>I wasn't notifying about the meetings that they had about this freeway being built. I believe that they should of set out flyers to notify people not just only landowners but members of our community that should also be included to this matter that is coming in affect to our reservation. Also, they should of provided transportation for the districts or have meetings at each of the service centers. Some of the community members don't have transportation to be these meeting were located at.</p> <p>Our land and mountain is important to me then this freeway. As I look towards the District 6 area I can see a slightly cloud of pollution. If we have this freeway there will be a huge cloud of pollution that will cover our land. It will affect our peoples health like; asthma, lung diseases, infants may be born with birth defects, and heart diseases. I am concerned about our future generations' health and what they would have to live if this freeway is built. We got to look forward and think of their future before considering anything, because I remember when I was younger my grandmother would always say "This is your land and never let a white person take it from you." Well she said it to me in Pima; I understood what she was saying after she explained to me.</p> <p>Thank You,</p>  <p>Winnona Catha P.O. Box 1021 Sacaton, AZ 85147 (520) 562-1530 my.2.butterflies.0913@gmail.com</p>

Code	Issue	Response
75	Tribal Involvement	<p>As noted in Chapter 2 of the Final Environmental Impact Statement, efforts to involve the Gila River Indian Community in the environmental impact statement process have been extensive. Public involvement with the Gila River Indian Community was conducted as requested by the tribal government. Prior to October 2005, early efforts to involve the Gila River Indian Community included attending tribal meetings and monthly meetings with Gila River Indian Community Departments (see discussion beginning on page 2-8 of the Draft and Final Environmental Impact Statements). On October 14, 2005, the Gila River Indian Community requested that all project-related communications take place at a government-to-government level (see letter on page A152 of Appendix 1-1). This request was honored by the Arizona Department of Transportation and Federal Highway Administration. All public involvement efforts were implemented by the Gila River Indian Community's public involvement officer.</p> <p>As noted in Table 4-47 that begins on page 4-145, the Gila River Indian Community was initially consulted in 2003 with subsequent contact in 2005, 2006, 2007, 2008, 2010, 2011, 2012, and 2013. This supports an early and continued consultation with the Gila River Indian Community related to resources of importance. This consultation has resulted in concurrence from the State Historic Preservation Office and Gila River Indian Community Tribal Historic Preservation Office on National Historic Preservation Act eligibility recommendations, project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.</p> <p>The Arizona Department of Transportation advertisement efforts of the public hearing and public forums are documented in Chapter 6 of the Final Environmental Impact Statement beginning on page 6-23. The Gila River Indian Community Communication and Public Affairs Office informed the Arizona Department of Transportation that all communication and distribution of informational materials on Gila River Indian Community land would be handled by the Communication and Public Affairs Office. Advertisement text regarding the project, the public comment period, the public hearing and the various ways for the public to submit comments regarding the South Mountain Freeway Draft Environmental Impact Statement was given to the Gila River Indian Community's Public Information Officer at the Transportation Technical Team meeting on April 30, 2013. Two advertisements regarding the public hearing, information regarding the location and availability of the Draft Environmental Impact Statement, and a map of the alternatives was placed in the May 2013 monthly issue of the <i>Gila River Indian News</i>.</p> <p>The Arizona Department of Transportation Community Relations distributed electronic notices (e-newsletters) through the Government Delivery system to over 12,000 constituents who voluntarily signed up for project alerts along the Interstate 10 Papago, Maricopa, and Santan Freeways. These electronic notices included notice of availability of Draft Environmental Impact Statement (distributed on April 26, 2013); public hearing (distributed on May 10, 2013); the community forums (distributed on May 29, 2013) and one in June (close of the Draft Environmental Impact Statement public comment period). In addition, anyone who had attended a previous meeting on the proposed action and signed in received all of this information mailed individually. On May 6, 2013, 73,564 mailers were distributed to addresses within the Study Area.</p>

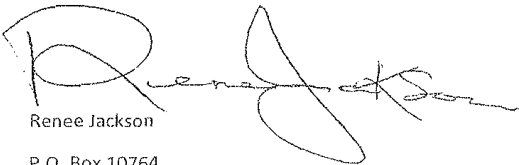
Code	Comment Document

Code	Issue	Response
75 (cont.)		The Arizona Department of Transportation provided vouchers for public hearing parking and for public transit to the hearing. For the first time in the State's history, a shuttle bus to the hearing was provided from six locations in the Phoenix area, including two on the Gila River Indian Community (Komatke Boys & Girls Club and the Governance Center in Sacaton). All ads provided telephone numbers and electronic contact information regarding information on the shuttle schedules and pick-up locations.
	Air Quality	<p>The Final Environmental Impact Statement addresses the history of air quality in the region (see text beginning on page 4-68 of the Final Environmental Impact Statement). The Clean Air Act § 109(b)(1) requires the U.S. Environmental Protection Agency to promulgate primary National Ambient Air Quality Standards at levels that allow an adequate margin of safety to protect the public health. Air quality in the Phoenix metropolitan area has improved over time; Phoenix was redesignated to attainment/maintenance for carbon monoxide in 2005, and the U.S. Environmental Protection Agency recently determined that Phoenix has attained the particulate matter (PM₁₀) standard. These improvements are largely associated with cleaner fuels and lower-emission vehicles along with local controls on fugitive dust. Future emissions would also be reduced by the use of cleaner-burning fuels, technological advances in automotive design (including the greater use of alternative fuel vehicles), reformulated gasoline, gas can standards, stricter enforcement of emission standards during inspections, heavy-duty diesel engine and on-highway diesel sulfur control programs, dust control programs, and others. The air quality assessment for the proposed freeway analyzed impacts from carbon monoxide and particulate matter (PM₁₀) and followed U.S. Environmental Protection Agency guidelines. No violations of either the carbon monoxide or particulate matter (PM₁₀) standards were identified, even at worst-case locations along the project corridor. Thus, the carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones. For mobile source air toxics, the analysis showed that for the Study Area, constructing the freeway would have a marginal effect on annual emissions in 2025 and 2035 (less than a 1 percent difference in total annual emissions between the Preferred Alternative and No-Action Alternative). With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions. The air quality analyses were updated for the Final Environmental Impact Statement, including a quantitative particulate matter (PM₁₀) analysis, and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement. Congestion relief resulting from the proposed freeway would provide localized air quality emissions reductions on area freeways and arterial streets and at interchanges, benefiting users of area highways and those living near congested roads.</p>

Code	Comment Document
76	<p>My name is Renee Jackson and I am a member of the Akimel O’odham tribe also known as the Gila River Indian Community. I am writing this statement for two reasons, 1) to give a supportive statement regarding the cultural significance of Muhadag (South Mountain) and 2) to state my concerns regarding the Arizona Department of Transportation’s lack of cooperation and planning with the people of GRIC.</p> <p>As an Akimel O’odham woman, I regard Muhadag (South Mountain) as a place of spiritual significance to the O’odham tribes. The mountain is central to the O’odham creation story and continues to be a place to hold ceremonies by and for the O’odham people. The mountain is also sacred to us because of the plant life we use for medicinal and ceremonial purposes and also because of the wildlife we hunt to sustain ourselves. The construction of this freeway would greatly harm the wellbeing of the mountain and therefore will bring harm to the O’odham.</p> <p>The manner in which ADOT has pursued the Gila River community member’s voice and cooperation regarding the Draft Environmental Impact Study and the planning process has been poor to say the least. There was very little communication between the GRIC and MAG and ADOT. When community members were then made aware of public hearings and meetings, it was short notice and not sympathetic to our community members lack of</p>

Code	Issue	Response
76	Tribal Involvement	<p>The importance of the South Mountains Traditional Cultural Property is acknowledged on pages 4-130 and 4-141 of the Draft and Final Environmental Impact Statements, respectively. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. This consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Historic Preservation Act eligibility recommendations, project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.</p> <p>As noted in Chapter 2 of the Final Environmental Impact Statement, efforts to involve the Gila River Indian Community in the environmental impact statement process have been extensive. Public involvement with the Gila River Indian Community was conducted as requested by the tribal government. Prior to October 2005, early efforts to involve the Gila River Indian Community included attending tribal meetings and monthly meetings with Gila River Indian Community Departments (see discussion beginning on page 2-8 of the Draft and Final Environmental Impact Statements). On October 14, 2005, the Gila River Indian Community requested that all project-related communications take place at a government-to-government level (see letter on page A152 of Appendix 1-1). This request was honored by the Arizona Department of Transportation and Federal Highway Administration. All public involvement efforts were implemented by the Gila River Indian Community’s public involvement officer.</p> <p>As noted in Table 4-47 that begins on page 4-145, the Gila River Indian Community was initially consulted in 2003 with subsequent contact in 2005, 2006, 2007, 2008, 2010, 2011, 2012, and 2013. This supports an early and continued consultation with the Gila River Indian Community related to resources of importance.</p> <p>The Arizona Department of Transportation advertisement efforts of the public hearing and public forums are documented in Chapter 6 of the Final Environmental Impact Statement beginning on page 6-23. The Gila River Indian Community Communication and Public Affairs Office informed the Arizona Department of Transportation that all communication and distribution of informational materials on Gila River Indian Community land would be handled by the Communication and Public Affairs Office. Advertisement text regarding the project, the public comment period, the public hearing and the various ways for the public to submit comments regarding the South Mountain Freeway Draft Environmental Impact Statement was given to the Gila River Indian Community’s Public Information Officer at the Transportation Technical Team meeting on April 30, 2013. Two advertisements regarding the public hearing, information regarding the location and availability of the Draft Environmental Impact Statement, and a map of the alternatives was placed in the May 2013 monthly issue of the <i>Gila River Indian News</i>.</p> <p>The Arizona Department of Transportation Community Relations distributed electronic notices (e-newsletters) through the Government Delivery system to over 12,000 constituents who voluntarily signed up for project alerts along the Interstate 10 Papago, Maricopa, and Santan Freeways. These electronic notices included notice of availability of Draft Environmental Impact Statement (distributed on April 26, 2013); public hearing (distributed on May 10, 2013); the community forums (distributed on May 29, 2013) and one in June (close of the</p>

(Response 76 continues on next page)

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	<p>transportation. Furthermore, when ADOT did hold a “Public Forum” in GRIC, members were not to voice their statements verbally as others were able to do at the Phoenix hearing.</p> <p>Most importantly, I feel that the possible construction of this freeway through our sacred Muhadag is a direct violation to my civil and religious rights as an Indigenous person. Also, as an advocate for my children, I wish to state my opposition to the Loop 202 expansion, aka, the South Mountain Freeway as I see it as a threat to their religious freedoms being that Muhadag is considered our most valued place of worship and must be protected for our future generations.</p> <div><p>Renee Jackson P.O. Box 10764 Bapchule, Az 85121 rjackson81@gmail.com (520)233-1634</p></div>

Code	Issue	Response
76 (cont.)		<p>Draft Environmental Impact Statement public comment period). In addition, anyone who had attended a previous meeting on the proposed action and signed in received all of this information mailed individually. On May 6, 2013, 73,564 mailers were distributed to addresses within the Study Area.</p> <p>The Arizona Department of Transportation provided vouchers for public hearing parking and for public transit to the hearing. For the first time in the State’s history, a shuttle bus to the hearing was provided from six locations in the Phoenix area, including two on the Gila River Indian Community (Komatke Boys & Girls Club and the Governance Center in Sacaton). All ads provided telephone numbers and electronic contact information regarding information on the shuttle schedules and pick-up locations.</p> <p>Community forums were held after the public hearing to further invite public comment.</p>
	Title VI	<p>Since the beginning of the environmental impact statement process, the Federal Highway Administration and Arizona Department of Transportation have been carrying out cultural resources studies and engaging in ongoing, open consultation with the Gila River Indian Community Tribal Historic Preservation Office regarding the identification and evaluation of places of religious and cultural importance to the tribe that may be adversely affected by the proposed freeway. Such places are referred to as traditional cultural properties. As a result of these discussions and of studies conducted by the Gila River Indian Community’s Cultural Resource Management Program, the Gila River Indian Community has identified traditional cultural properties that are eligible for listing in the National Register of Historic Places and that could be affected by construction of the proposed freeway. In certain cases, listing these properties on the National Register of Historic Places may offer them protection under Section 4(f) of the Department of Transportation Act. The traditional cultural properties identified are culturally important to other Native American tribes as well. For more discussion of traditional cultural properties, see the section, <i>Cultural Resources</i>, beginning on page 4-140 of the Final Environmental Impact Statement and pages 5-26 through 5-28.</p> <p>Section 106 of the National Historic Preservation Act requires a government-to-government relationship between the Federal Government and Indian tribes as described beginning on page 4-140 of the Final Environmental Impact Statement. Section 106 requires that federal agencies take into account the effects of their undertakings on historic properties. This process requires consultation with tribal authorities. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. The consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Register of Historic Places eligibility recommendations (including traditional cultural properties), project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.</p>

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Code	Issue	Response
76 (cont.)		The Draft Environmental Impact Statement, after consultation and coordination efforts, accommodates and preserves (to the fullest extent possible from the available alternatives) access to the South Mountains for religious practices. A very small portion of the mountain would be impacted by the proposed freeway (less than 0.03 percent of the total area). Although the Draft Environmental Impact Statement describes the impact on the South Mountains as adverse, Native Americans would not be kept from practicing their beliefs, access to the mountain would be maintained, and mitigation measures would be implemented based on input from members of the Gila River Indian Community.

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77	<p>My name is Peggy Mae Morago I am 66 yrs. old retired elementary school teacher an elder from the Gila River Indian Community. I am writing this statement to express my opposition and concerns about A.D.O.T.s proposed South Mountain Loop 202 Freeway.</p> <p>I have a very strong connection to South Mountain. In my late teens I left my hometown of Ajo, Arizona to attend Arizona State University. As a young woman far from home it was a difficult adjustment to live in the city, but going to South Mountain help with this transition. According to our oral history South Mountain is a sacred mountain to our people. Akimel O’odham legends and stories talk about South Mountain being the home of the deity for our tribe. There are also stories about artifacts and petroglyphs from our ancestors the Hohokam located on South Mountain. As a young mother raising a child in the late sixties/early seventies, I often went to South Mountain to meditate when times became tough or if I was unable to return to Gila River for family emergencies. South Mountain has always made me feel closer to home and closer to my O’odham Himdag.</p> <p>One of my major concerns about the proposed South Mountain Loop 202 freeway is the health effects on my community. As a retired school teacher I am well aware of the rise in respiratory illness in children within all communities. This proposed freeway will increase the occurrence of asthma, bronchitis, and many other respiratory ailments due to particulate matter and pollutions from this project. The elderly, newborns and young children will be hit the hardest from this freeway. I am an elder with Valley Fever; this freeway will defiantly affect my health. This is the major reason why I don’t travel to the Phoenix metro area. It is difficult for me to breath from all to pollution in the air, and I don’t want this pollution in my community.</p> <p>Another issue I wish to address is the way A.D.O.T. conducted the meetings for the public. I was unable to attend the ONE and only meeting that I would have been allowed to speak at publicly. As stated before I don’t travel to the Phoenix metro-area due to the distance, pollution and the heat. I am an elder that is in a wheelchair, which needs assistance to get around. Attending this meeting was impractical for me and the ONE meeting held in the Gila River Indian Community was held over fifty miles from my home. I feel that A.D.O.T. violated my civil right by not allowing anyone to speak at the meeting held in the Gila River Indian Community, as well as other meetings held in other communities. I was raised by oral traditions, I was taught to speak out, and I have a right to be heard in a public form.</p> <p>Inclosing I want to state for the record that the proposed Loop 202 South Mountain Freeway is wrong. The destruction of our Sacred Mountain is not only a violation of our traditions and heritage, but detrimental to our O’odham Himdag. Enough has been taken away from us already, why must we sacrifice more.</p> <p><i>Peggy Mae Morago 7-6-2013</i> Peggy Mae Morago 7/6/2013 G.R.I.D. # 6675 P.O. Box 1289 Sacaton, Arizona 85147</p>

Code	Issue	Response
77	Cultural Resources	The importance of the South Mountains Traditional Cultural Property is acknowledged on pages 4-130 and 4-141 of the Draft and Final Environmental Impact Statements, respectively. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. This consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Historic Preservation Act eligibility recommendations, project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.
	Air Quality	The Final Environmental Impact Statement addresses the history of air quality in the region (see text beginning on page 4-68 of the Final Environmental Impact Statement). The Clean Air Act § 109(b)(1) requires the U.S. Environmental Protection Agency to promulgate primary National Ambient Air Quality Standards at levels that allow an adequate margin of safety to protect the public health. Air quality in the Phoenix metropolitan area has improved over time; Phoenix was redesignated to attainment/maintenance for carbon monoxide in 2005, and the U.S. Environmental Protection Agency recently determined that Phoenix has attained the particulate matter (PM ₁₀) standard. These improvements are largely associated with cleaner fuels and lower-emission vehicles along with local controls on fugitive dust. Future emissions would also be reduced by the use of cleaner-burning fuels, technological advances in automotive design (including the greater use of alternative fuel vehicles), reformulated gasoline, gas can standards, stricter enforcement of emission standards during inspections, heavy-duty diesel engine and on-highway diesel sulfur control programs, dust control programs, and others. The air quality assessment for the proposed freeway analyzed impacts from carbon monoxide and particulate matter (PM ₁₀) and followed U.S. Environmental Protection Agency guidelines. No violations of either the carbon monoxide or particulate matter (PM ₁₀) standards were identified, even at worst-case locations along the project corridor. Thus, the carbon monoxide and particulate matter (PM ₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones. For mobile source air toxics, the analysis showed that for the Study Area, constructing the freeway would have a marginal effect on annual emissions in 2025 and 2035 (less than a 1 percent difference in total annual emissions between the Preferred Alternative and No-Action Alternative). With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions. The air quality analyses were updated for the Final Environmental Impact Statement, including a quantitative particulate matter (PM ₁₀) analysis, and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement. Congestion relief resulting from the proposed freeway would provide localized air quality emissions reductions on area freeways and arterial streets and at interchanges, benefiting users of area highways and those living near congested roads.

Code	Comment Document


Code	Issue	Response
77 (cont.)	Tribal Involvement	<p>The Arizona Department of Transportation provided vouchers for public hearing parking and for public transit to the hearing. For the first time in the State’s history, a shuttle bus to the hearing was provided from six locations in the Phoenix area, including two on the Gila River Indian Community (Komatke Boys & Girls Club and the Governance Center in Sacaton). All ads provided telephone numbers and electronic contact information regarding information on the shuttle schedules and pick-up locations.</p> <p>Community forums were held after the public hearing to further invite public comment.</p>

Code	Comment Document
78	<p>My name is Joseph C. Morago I am a member the Gila River Indian Community. I am writing this statement to address my opposition of the South Mountain Loop 202 Freeway. As a charter member of G.R.A.C.E. (Gila River Alliance for a Clean Environment) I have followed this issue for many years. During this time I have notice the condescending attitude and lack of respect that A.D.O.T. (Arizona Department of Transportation) has shown to the people of the Gila River Indian Community. For well over two decades our community has repeatedly reject the idea of a freeway passing thought our community, because of cultural, religious, environmental and the current and potential health affects to our community. In spite of our concerns and objections A.D.O.T., M.A.G. (Maricopa Association of Governments), Maricopa County, and the Maricopa Regional Transportation Team still insist on building the South Mountain Loop 202 Freeway by blasting away a piece of our sacred mountain.</p> <p>South Mountain is a sacred place of cultural significant to the people of Gila River. Oral history and legends state that South Mountain is the home of “Elder Brother” (I’itoi) deity of the Akimil O’odham Tribe (Gila River Indian Community Tribe). South Mountain was also once inhabited by our ancestors the Hohokam. The Hohokam has been acknowledged by archeologist, anthropologist and historians to be one of the first settlers of this region. South Mountain is also a place of worship, sacred ceremonies are preformed, prayer and blessings are giving and shrines are built to honor I’itoi and our ancestors. Other activities such as the harvesting of the saguaro cactus fruit and gathering of medicinal plants occur at different times of the year. Because of the sacredness of South Mountain, any destruction would be detrimental to the spiritual wellbeing of the people of the Gila River Indian Community.</p> <p>Another major concern about this proposed freeway project is the health effects on the people of the Gila River Indian Community due to air quality. According to the 2005 Joint Air Toxics Assessment Program (JATAP) Gila River has a high level of Particulate Matter (PM) and Volatile Organic Compounds (VOC) in the air above the community. If the proposed South Mountain Loop 202 Freeway is completed the air quality over the Gila River Indian Community would drastically change for the worse. The U.S.E.P.A. (United States Environmental Protection Agency) “Green Book” states that Maricopa County has been nonattainment in Particulate Matter (PM)-10 since 1992. PM-10 is inhalable course particulates that consist of a complex mixture of extremely small particle and liquid droplets made up several components like acids, organic chemicals, metals, and soil or dust particles, which can cause an increase of Heart and Lung disease.</p> <p>Short term exposure to PM-10 can increase susceptibility to respiratory infections, aggravated lung disease, acute bronchitis and an increase of asthma attacks. Long term exposure to PM-10 have been associated with reduced lung function, chronic bronchitis, premature death, low birth weights in infants, premature delivery, and possible fetal and infant death. Infants are not the only ones at risk to these types of ailments. Older adults, the elderly, children, active adults, and people with lung and heart disease, reseni studies have shown that people with diabetes are also at risk when exposed to Particulate Matter (PM)-10.</p>

Code	Issue	Response
78	Tribal Involvement	<p>As noted in Chapter 2 of the Final Environmental Impact Statement, efforts to involve the Gila River Indian Community, a sovereign nation, in the environmental impact statement process are extensive. Public involvement with the Gila River Indian Community was conducted as requested by the tribal government. Prior to October 2005, early efforts to involve the Gila River Indian Community included attending tribal meetings and monthly meetings with Gila River Indian Community Departments (see discussion beginning on page 2-8 of the Draft and Final Environmental Impact Statements). On October 14, 2005, the Gila River Indian Community requested that all project-related communications take place at a government-to-government level (see letter on page A152 of Appendix 1-1). This request was honored by the Arizona Department of Transportation and Federal Highway Administration. All public involvement efforts were implemented by the Gila River Indian Community’s public involvement officer.</p> <p>As noted in Table 4-47 that begins on page 4-145, the Gila River Indian Community was initially consulted in 2003 with subsequent contact in 2005, 2006, 2007, 2008, 2010, 2011, 2012, and 2013. This supports an early and continued consultation with the Gila River Indian Community related to resources of importance. This consultation has resulted in concurrence from the State Historic Preservation Office and Gila River Indian Community Tribal Historic Preservation Office on National Historic Preservation Act eligibility recommendations, project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.</p> <p>The Draft Environmental Impact Statement on page 2-4 acknowledges that the Gila River Indian Community Council passed Resolution GR-64-96 that strongly opposed any future alignment of the South Mountain Freeway on Gila River Indian Community land. In addition, the comments received from Gila River Indian Community Governor Gregory Mendoza (see letter dated July 11, 2013, on page B38 in Appendix 7, Volume III, of the Final Environmental Impact Statement) confirm the Gila River Indian Community’s position. Any alternative on Gila River Indian Community land must consider tribal sovereignty. Tribal sovereignty is based in the inherent authority of Native American tribes to govern themselves. While this notion of sovereignty is manifested in many areas, generally Native American land is held in trust by the United States. Native American communities have the authority to regulate land uses and activities on their lands. States have very limited authority over activities within tribal land (see page 2-1 of the Final Environmental Impact Statement). From a practical standpoint, this means that the Arizona Department of Transportation and Federal Highway Administration do not have the authority to survey tribal land, make land use (including transportation) determinations directly affecting tribal land, or condemn tribal land for public benefit through an eminent domain process. In addition to Chapter 2 of the Final Environmental Impact Statement which explains the Gila River Indian Community outreach undertaken for the project, Chapter 6 of the Final Environmental Impact Statement further describes Community and general outreach throughout the process. The Gila River Indian Community was provided equal opportunities to participate in the project as all other populations and agencies. This outreach was undertaken, in part, to ensure all populations had equal access to the process and, in part, to ensure disparate nor disproportionately high adverse impacts would result from the construction and operation of the proposed action.</p>

Code	Comment Document
	<p>The Gila River Indian Community is not the only community to raise concerns over this proposed freeway project. The residents of Ahwatukee Foothills have raised some of the same concerns about the South Mountain Loop 202 Freeway. As stated before I am a member of G.R.A.C.E. and I am also a member of P.A.R.C. (Protect Arizona’s Resources & Children) to protect South Mountain. One of P.A.R.C.’s major concerns is the potential for a hazardous material incident if an accident is to occur on this proposed freeway project. According to the maps in the D.E.I.S. and A.D.O.T.’s video presentation, the South Mountain Loop 202 Freeway would be within a mile of several schools, homes, and businesses that would have to be evacuated of such an incident were to occur. With too few exits and an ineffective emergency management plan the possibility for serious injury, long term illness or loss of life is extremely high.</p> <p>The next issue I wish to address is the manner in which A.D.O.T. has disseminated information concerning the South Mountain Loop 202 Freeway to the people of the Gila River Indian Community. The D.E.I.S. states that A.D.O.T. attended 178 meetings with the Gila River Indian Community. If this is true why did A.D.O.T. only attend a couple meetings with tribal council in over a decade? Who did A.D.O.T. meet with from the Gila River Indian Community? Why did A.D.O.T. fail to properly notify community members of public meeting, and why does A.D.O.T. acknowledge the cultural and religious significant of South Mountain to the Akimil O’odham people but dismiss these facts by insisting on moving forward with the construction of the South Mountain Loop 202 Freeway.</p> <p>An addition to the previous mentioned issues I would like to address A.D.O.T.’s handling of the of the ninety day public comment period concerning the D.E.I.S. I feel that A.D.O.T. mishandled and misinformed the people of the Gila River Indian Community. The D.E.I.S. was released on April 25, 2013. On April 30, 2013 A.D.O.T., M.A.G., the TTT (Transportation Technical Team), Gila River Indian Community Executive Office, G.R.I.C. Law Office, G.R.A.C.E., G.R.E.Y. (Gila River Environmental Youth) with five other grassroots and private corporation organizers met to discuss how community members would be able to comment on the D.E.I.S. Among the issues discussed was transportation to the public comment meeting in Downtown Phoenix, conformation of a meeting(s) in Gila River, issues with submitting comments online, and notification to community member about important meetings, dates and other relevant information concerning the D.E.I.S. comment period.</p> <p>At this meeting A.D.O.T. agreed to hold one or more public meeting(s) in Gila River to accept comments on the D.E.I.S. A.D.O.T. stated at this meeting that they would also provide free bus passes to the Downtown Phoenix public comment hearing. What A.D.O.T. failed to do was provide proper and concise information. A.D.O.T. never told community member that they would not be able to speak at the meeting in Gila River. A.D.O.T. also failed to provide adequate notice of this meeting. Although a notice was posted in the Gila River Indian Newspaper, this notice appeared in the paper only once on the days prior to the meeting scheduled in Gila River.</p>

Code	Issue	Response
78 (cont.)	Cultural Resources	The importance of the South Mountains Traditional Cultural Property is acknowledged on pages 4-130 and 4-141 of the Draft and Final Environmental Impact Statements, respectively. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. This consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Historic Preservation Act eligibility recommendations, project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.
	Health Effects	<p>Under the Clean Air Act, the U.S. Environmental Protection Agency is responsible for establishing National Ambient Air Quality Standards to protect public health and the environment from adverse effects of air pollutants. Health effects from air pollutants are based on the concentration of the pollutants and the duration of exposure. Concentrations vary with distance from a roadway based on many factors, including background (or ambient) levels of pollution from all sources; the number, speed, and type of vehicles on the roadway; wind speed and direction; topography; and other factors. For the proposed freeway, the Federal Highway Administration conducted modeling for carbon monoxide and particulate matter (PM₁₀) using worst-case (most congested or highest traffic) modeling locations at discrete receptor locations around each analysis location (primarily residences near the interchanges). The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones.</p> <p>Mobile source air toxics can also have adverse health impacts, but the U.S. Environmental Protection Agency has not established National Ambient Air Quality Standards for these pollutants. As a result, the Federal Highway Administration analyzes these pollutants using emissions analyses. The mobile source air toxics emissions analysis for the Study Area found little difference in total annual emissions of mobile source air toxics emissions between the Preferred and No-Action Alternatives (less than a 1 percent difference) in 2025 and 2035. With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions.</p> <p>Many studies have investigated the prevalence of adverse health effects in the near-road environment. Given concerns about the possibility of air pollution exposure in the near-road environment, the Health Effects Institute has dedicated a number of research efforts toward investigating this issue. In November 2007, the Health Effects Institute published Special Report #16: Mobile-Source Air Toxics: A Critical Review of the Literature on Exposure and Health Effects. This report concluded that the cancer health effects attributable to mobile sources are difficult to discern because the majority of quantitative assessments are derived from occupational cohorts with high concentration exposures and because some cancer potency estimates are derived from animal models. In January 2010, the Health Effects Institute released Special Report #17, investigating the health effects of traffic-related air pollution. The goal of the research was to synthesize available information on the effects of traffic on health. Researchers looked at linkages between: 1) traffic emissions (at the tailpipe)</p>

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	<p>Inclosing I would like to state for the record that A.D.O.T. has not acted in good faith concerning the South Mountain Loop 202 Freeway project as it pertains to the people of the Gila River Indian Community. In fact A.D.O.T. has violated the Civil Rights of the Gila River Indian Community by acknowledging the significant and sacredness of South Mountain, but dismissing these facts with plans to blast through portions of South Mountain. In effect A.D.O.T. has discriminated against the Gila River Indian Community by preventing tribal members from participating in the comment process. The failure of notification of meetings held within the Gila River Indian Community, not allowing tribal members to make verbal public comments at the only public form held within the Gila River Indian Community, and failure to provide the bus passes promised to the Gila River Tribal Leadership for community members to attend the only meeting that public verbal comments were accepted. A.D.O.T. has violated the Civil Rights of the residents of the Gila River Indian Community and should not be able to receive federal funding for the South Mountain Loop 202 Freeway project.</p> <p> 7/22/2013</p> <p>Joseph C. Morago 7/22/2013</p> <p>G.R.I.D. # 12192</p> <p>P.O. Box 1289</p> <p>Sacaton, Arizona 85147</p> <p>(520) 562-3886</p> <p>Rezrocker67@yahoo.com</p>

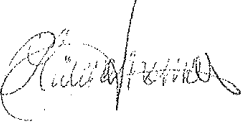
Code	Issue	Response
78 (cont.)		<p>with ambient air pollution in general, 2) concentrations of ambient pollutants with human exposure to pollutants from traffic, 3) exposure to pollutants from traffic with human-health effects and toxicological data, and 4) toxicological data with epidemiological associations. Overall, researchers felt that there was “sufficient” evidence for causality for the exacerbation of asthma. Evidence was “suggestive but not sufficient” for health outcomes such as cardiovascular mortality and others. Study authors also noted that past epidemiological studies may not provide an appropriate assessment of future health associations because vehicle emissions are decreasing over time. Finally, in 2011 three studies were published by the Health Effects Institute evaluating the potential for mobile source air toxics “hot spots.” In general, the authors confirmed that while highways are a source of air toxics, they were unable to find that highways were the only source of these pollutants. They determined that near-road exposures were often no different or no higher than background (or ambient) levels of exposure and, hence, no true hot spots were identified. These reports are available from the Health Effects Institute’s Web site at <healtheffects.org>. The Federal Highway Administration and U.S. Environmental Protection Agency provide financial support to the Health Effects Institute’s research work.</p> <p>Another source of information is the U.S. Environmental Protection Agency’s recently released report on Children’s Health and the Environment:</p> <p><i>The level of knowledge regarding the relationship between environmental exposures and health outcomes varies widely among the topics [presented in this report], and the inclusion of an indicator in the report does not necessarily imply a known relationship between environmental exposure and children’s health effects. The report provides data for selected children’s health conditions that warrant further research because the causes, including possible contributing environmental factors, are complex and not well understood at this point.</i></p> <p><i>In the case of asthma, researchers do not fully understand why children develop the condition. However, substantial evidence shows exposure to certain air pollutants, including particulate matter and ozone, can trigger symptoms in children who already have asthma. Although the report found the percentage of children reported to currently have asthma increased from 8.7 percent in 2001 to 9.4 percent in 2010 and that minority populations are particularly affected by asthma, the severity of children’s asthma and respiratory symptoms has declined. The rate of emergency room visits for asthma decreased from 114 visits per 10,000 children in 1996 to 103 visits per 10,000 children in 2008. Between 1996 and 2008, hospitalizations for asthma and for all other respiratory causes decreased from 90 hospitalizations per 10,000 children to 56 hospitalizations per 10,000 children.</i></p> <p><i>The report also looks at trends in other health conditions, such as Attention-Deficit/Hyperactivity Disorder (ADHD) and preterm births, for which rates have increased. There is no conclusive information on the role of environmental contaminants in ADHD or preterm births, and additional research is ongoing.</i></p> <p>Finally, the Federal Highway Administration notes that while the incidence of some health effects (such as asthma, autism, and attention deficit/hyperactivity disorder) in the U.S. population appear to have been increasing, motor vehicle emissions have declined. This decline in mobile source air toxics emissions is documented in Figure 4-24 of the Final Environmental Impact Statement and for other pollutants at <epa.gov/ttn/chief/trends/>. This negative correlation between emissions trends and health effects trends illustrates the complexity of the issues.</p>

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78 (cont.)	Hazardous Materials	<p>Arizona highways, as are most highways across the United States, are open to all kinds of traffic, so long as the cargo being carried is in accordance with U.S. Department of Transportation regulations for the specific type of cargo. The Arizona Department of Transportation has a few locations in the state with hazardous cargo restrictions, but these restrictions are based on emergency response issues or roadway design limitations specific to that location. For example, the Interstate 10 Deck Park Tunnel has certain hazardous cargo transport restrictions because of the limited ability for emergency responders to address a hazardous materials incident in the tunnel. The South Mountain Freeway, if implemented, is expected to operate under the same rules as other similar facilities in the state; transport of hazardous cargo would be expected to be permissible (see text box on page 4-166 of the Final Environmental Impact Statement).</p> <p>The Arizona Department of Public Safety (which includes the State Highway Patrol) has primary responsibility for enforcing traffic laws. The Department of Public Safety also has primacy when calling in support for traffic accidents, including hazardous materials accidents (see text box on page 4-166 of the Final Environmental Impact Statement). The Arizona Department of Transportation maintains a list of contractors who provide emergency response services, as well as local municipalities whose fire and police departments operate in cooperation with the Department of Public Safety on incidents within their jurisdiction. Requirements for shippers are maintained by the Arizona Department of Transportation's Enforcement Compliance Division.</p> <p>The project team is aware of the Hazardous Materials Commodity Flow Studies that the Arizona State Emergency Response Commission maintains. These studies are used by emergency response planners (such as the Arizona State Emergency Response Commission statewide and the Maricopa County Local Emergency Planning Commission for Maricopa County) as one of the elements considered when developing Emergency Response Plans. If the plan is amended, it is made available to the Arizona Department of Transportation.</p> <p>In the event of an incident with a hazardous materials issue on a State or federal highway, the emergency responders contact the Arizona Department of Transportation's Traffic Operations Center to report the incident. The Traffic Operations Center then contacts the Arizona Department of Transportation's Safety and Risk Management group, who responds to the accident scene and assesses needs in concert with the Incident Commander from the responding agency with jurisdiction. If requested, the Arizona Department of Transportation can assist cleanup activities by engaging specialty subcontractors with whom the Arizona Department of Environmental Quality has contracts for such support. The Arizona Department of Transportation's Safety and Risk Management group's charge is primarily public health protection, with cleanup support being secondary.</p>
	Tribal Involvement	<p>As noted in Chapter 2 of the Final Environmental Impact Statement, efforts to involve the Gila River Indian Community in the environmental impact statement process have been extensive. Public involvement with the Gila River Indian Community was conducted as requested by the tribal government. Prior to October 2005, early efforts to involve the Gila River Indian Community included attending tribal meetings and monthly meetings with Gila River Indian Community Departments (see discussion beginning on page 2-8 of the Draft and Final</p>

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78 (cont.)		<p>Environmental Impact Statements). On October 14, 2005, the Gila River Indian Community requested that all project-related communications take place at a government-to-government level (see letter on page A152 of Appendix 1-1). This request was honored by the Arizona Department of Transportation and Federal Highway Administration. All public involvement efforts were implemented by the Gila River Indian Community’s public involvement officer.</p> <p>The Arizona Department of Transportation advertisement efforts of the public hearing and public forums are documented in Chapter 6 of the Final Environmental Impact Statement beginning on page 6-23. The Gila River Indian Community Communication and Public Affairs Office informed the Arizona Department of Transportation that all communication and distribution of informational materials on Gila River Indian Community land would be handled by the Communication and Public Affairs Office. Advertisement text regarding the project, the public comment period, the public hearing and the various ways for the public to submit comments regarding the South Mountain Freeway Draft Environmental Impact Statement was given to the Gila River Indian Community’s Public Information Officer at the Transportation Technical Team meeting on April 30, 2013. Two advertisements regarding the public hearing, information regarding the location and availability of the Draft Environmental Impact Statement, and a map of the alternatives was placed in the May 2013 monthly issue of the <i>Gila River Indian News</i>.</p> <p>The Arizona Department of Transportation Community Relations distributed electronic notices (e-newsletters) through the Government Delivery system to over 12,000 constituents who voluntarily signed up for project alerts along the Interstate 10 Papago, Maricopa, and Santan Freeways. These electronic notices included notice of availability of Draft Environmental Impact Statement (distributed on April 26, 2013); public hearing (distributed on May 10, 2013); the community forums (distributed on May 29, 2013) and one in June (close of the Draft Environmental Impact Statement public comment period). In addition, anyone who had attended a previous meeting on the proposed action and signed in received all of this information mailed individually. On May 6, 2013, 73,564 mailers were distributed to addresses within the Study Area.</p> <p>Community forums were held after the public hearing to further invite public comment.</p> <p>The Arizona Department of Transportation provided vouchers for public hearing parking and for public transit to the hearing. For the first time in the State’s history, a shuttle bus to the hearing was provided from six locations in the Phoenix area, including two on the Gila River Indian Community (Komatke Boys & Girls Club and the Governance Center in Sacaton). All ads provided telephone numbers and electronic contact information regarding information on the shuttle schedules and pick-up locations.</p>
	Title VI	<p>The Arizona Department of Transportation and Federal Highway Administration provided equal access to the public participation process to the Gila River Indian Community and its members. The Arizona Department of Transportation and Federal Highway Administration solicited input from the Gila River Indian Community and other Native American tribes and tribal members and considered fully the substantive input and comments that were received.</p>

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79	<p>My name is Laura M. Thomas. I am an enrolled member of The Gila River Indian Community. I am also a member of G.R.A.C.E. - Gila River Alliance for a Clean Environment. I am the founder G.R.E.Y. - Gila River Environmental Youth. I am also a member of P.A.R.C. - Protecting Arizona's Resources and Children.</p> <p>When I was younger I recall being taught about our people's heritage. Hearing the stories and being told about things that occurred many years ago in our culture. I remember being taught by my elders that we come from South Mountain. Battles were fought, families settled, it was always considered to be home to our people.</p> <p>In regards to this issue, I had been under the impression that the people of Gila River Indian Community had passed a vote for no build on the loop 202. This issue continues to be pushed upon our community after it has been said by the people we do not want this. The efforts put forth by A.D.O.T. (Arizona Department of Transportation) in the case of the freeway are a burden upon the people of the community. Each meeting they hold to try and convince community members to be in favor of the freeway is reaching a level of harassment. People have to take time out of their day in order to be able to attend meetings after it has been clearly said "we as a people do not want it".</p> <p>My people have been affected by chemical exposure. There are also many questions about health concerns that may arise because of the projected freeway. Air pollution, destruction of our sacred mountain, negative effects on the environment and the discrimination against our religious and cultural beliefs is why I'm against the proposed South Mountain Loop 202 Freeway.</p> <p>Laura Thomas</p> <p>P.O. Box #11217 Bapchule, Az. 85121 (480)532-5331 ltomas1985@yahoo.com</p> 

Code	Issue	Response
79	Cultural Resources	<p>The importance of the South Mountains Traditional Cultural Property is acknowledged on pages 4-130 and 4-141 of the Draft and Final Environmental Impact Statements, respectively. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. This consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Historic Preservation Act eligibility recommendations, project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.</p> <p>The Draft and Final Environmental Impact Statements on page 2-4 acknowledges that the Gila River Indian Community Council passed Resolution GR-64-96 that strongly opposed any future alignment of the South Mountain Freeway on Community land. In addition, the comments received from Gila River Indian Community Governor Gregory Mendoza (see letter dated July 11, 2013, on page B38 in Appendix 7, Volume III, of the Final Environmental Impact Statement) confirm the Gila River Indian Community's position. Any alternative on Gila River Indian Community land must consider tribal sovereignty. Tribal sovereignty is based in the inherent authority of Native American tribes to govern themselves. While this notion of sovereignty is manifested in many areas, generally Native American land is held in trust by the United States. Native American communities have the authority to regulate land uses and activities on their lands. States have very limited authority over activities within tribal land (see page 2-1 of the Final Environmental Impact Statement). From a practical standpoint, this means that the Arizona Department of Transportation and Federal Highway Administration do not have the authority to survey tribal land, make land use (including transportation) determinations directly affecting tribal land, or condemn tribal land for public benefit through an eminent domain process.</p>
	Alternatives	<p>In accordance with the National Environmental Policy Act, a range of reasonable action alternatives to carry forward for further analysis was determined through application of multidisciplinary criteria in a logical, step-wise progression. The preferred alternative was the outcome to this process. Alternatives were not disposed of or dismissed without a thorough evaluation using the multidisciplinary criteria outlined in the alternatives development and screening process presented in Chapter 3 of the Draft and Final Environmental Impact Statement. The preferred alternative was the outcome to this process.</p>
	Tribal Involvement	<p>As noted in Chapter 2 of the Final Environmental Impact Statement, efforts to involve the Gila River Indian Community, a sovereign nation, in the environmental impact statement process are extensive.</p>
	Health Effects	<p>Under the Clean Air Act, the U.S. Environmental Protection Agency is responsible for establishing National Ambient Air Quality Standards to protect public health and the environment from adverse effects of air pollutants. Health effects from air pollutants are based on the concentration of the pollutants and the duration of exposure. Concentrations vary with distance from a roadway based on many factors, including background (or ambient) levels of pollution from all sources; the number, speed, and type of vehicles on the roadway; wind speed and direction; topography; and other factors. For the proposed freeway, the Federal Highway Administration conducted modeling for carbon monoxide and particulate matter</p>

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79 (cont.)		<p>(PM₁₀) using worst-case (most congested or highest traffic) modeling locations at discrete receptor locations around each analysis location (primarily residences near the interchanges). The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones. Mobile source air toxics can also have adverse health impacts, but the U.S. Environmental Protection Agency has not established National Ambient Air Quality Standards for these pollutants. As a result, the Federal Highway Administration analyzes these pollutants using emissions analyses. The mobile source air toxics emissions analysis for the Study Area found little difference in total annual emissions of mobile source air toxics emissions between the Preferred and No-Action Alternatives (less than a 1 percent difference) in 2025 and 2035. With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions.</p> <p>Many studies have investigated the prevalence of adverse health effects in the near-road environment. Given concerns about the possibility of air pollution exposure in the near-road environment, the Health Effects Institute has dedicated a number of research efforts toward investigating this issue. In November 2007, the Health Effects Institute published Special Report #16: Mobile-Source Air Toxics: A Critical Review of the Literature on Exposure and Health Effects. This report concluded that the cancer health effects attributable to mobile sources are difficult to discern because the majority of quantitative assessments are derived from occupational cohorts with high concentration exposures and because some cancer potency estimates are derived from animal models. In January 2010, the Health Effects Institute released Special Report #17, investigating the health effects of traffic-related air pollution. The goal of the research was to synthesize available information on the effects of traffic on health. Researchers looked at linkages between: 1) traffic emissions (at the tailpipe) with ambient air pollution in general, 2) concentrations of ambient pollutants with human exposure to pollutants from traffic, 3) exposure to pollutants from traffic with human-health effects and toxicological data, and 4) toxicological data with epidemiological associations. Overall, researchers felt that there was “sufficient” evidence for causality for the exacerbation of asthma. Evidence was “suggestive but not sufficient” for health outcomes such as cardiovascular mortality and others. Study authors also noted that past epidemiological studies may not provide an appropriate assessment of future health associations because vehicle emissions are decreasing over time. Finally, in 2011 three studies were published by the Health Effects Institute evaluating the potential for mobile source air toxics “hot spots.” In general, the authors confirmed that while highways are a source of air toxics, they were unable to find that highways were the only source of these pollutants. They determined that near-road exposures were often no different or no higher than background (or ambient) levels of exposure and, hence, no true hot spots were identified.</p>

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Code	Issue	Response
79 (cont.)		<p>These reports are available from the Health Effects Institute’s Web site at <healtheffects.org>. The Federal Highway Administration and U.S. Environmental Protection Agency provide financial support to the Health Effects Institute’s research work.</p> <p>Another source of information is the U.S. Environmental Protection Agency’s recently released report on Children’s Health and the Environment:</p> <p><i>The level of knowledge regarding the relationship between environmental exposures and health outcomes varies widely among the topics [presented in this report], and the inclusion of an indicator in the report does not necessarily imply a known relationship between environmental exposure and children’s health effects. The report provides data for selected children’s health conditions that warrant further research because the causes, including possible contributing environmental factors, are complex and not well understood at this point.</i></p> <p><i>In the case of asthma, researchers do not fully understand why children develop the condition. However, substantial evidence shows exposure to certain air pollutants, including particulate matter and ozone, can trigger symptoms in children who already have asthma. Although the report found the percentage of children reported to currently have asthma increased from 8.7 percent in 2001 to 9.4 percent in 2010 and that minority populations are particularly affected by asthma, the severity of children’s asthma and respiratory symptoms has declined. The rate of emergency room visits for asthma decreased from 114 visits per 10,000 children in 1996 to 103 visits per 10,000 children in 2008. Between 1996 and 2008, hospitalizations for asthma and for all other respiratory causes decreased from 90 hospitalizations per 10,000 children to 56 hospitalizations per 10,000 children.</i></p> <p><i>The report also looks at trends in other health conditions, such as Attention-Deficit/Hyperactivity Disorder (ADHD) and preterm births, for which rates have increased. There is no conclusive information on the role of environmental contaminants in ADHD or preterm births, and additional research is ongoing.</i></p> <p>Finally, the Federal Highway Administration notes that while the incidence of some health effects (such as asthma, autism, and attention deficit/hyperactivity disorder) in the U.S. population appear to have been increasing, motor vehicle emissions have declined. This decline in mobile source air toxics emissions is documented in Figure 4-24 of the Final Environmental Impact Statement and for other pollutants at <epa.gov/ttn/chief/trends/>. This negative correlation between emissions trends and health effects trends illustrates the complexity of the issues.</p>
	Title VI	<p>As documented in the Draft and Final Environmental Impact Statements section, <i>Environmental Justice and Title VI</i>, beginning on page 4-29, identifies acceptable methods, data, and assumptions to assess the potential for disproportionate adverse effects from the proposed action on certain populations including minority and low-income populations in sufficient detail to explain its function and the manner in which the analysis of impacts was undertaken for the proposed action to determine that no disparate impacts occurred; therefore, the Arizona Department of Transportation and Federal Highway Administration respectfully disagree that a violation to civil and religious rights has occurred.</p>

Code	Comment Document
80	<p>Fairietta Morago</p> <p>Gila River Indian Community</p>
	<p>South Mountain is important to me because it’s part of our heritage. There are many teachings that go with that mountain. Stories and songs that our future generations to carry on. To take the South Mountain away is a great impact to the Gila River Indian Community. It would be losing a part of us even more.</p> <p>I am the 3rd generation from the boarding school era. Because of that era that happened to our grandparents. Some of the stories and songs will be lost forever. Our communities as O’odham people here on Gila River Indian Community need to salvage what is left of our lands. Not ruin it by putting a freeway through it. Learn to honor and take care of our lands.</p> <p>Be making change this drastic is beyond the environmental issues, and the budget/cost it will take to put this freeway there.</p> <p>It’s spiritually connection to all walks of life. A way to stay in balance for society to be whole as best as it can be. Nobody takes time to listen and learn to why certain places should be left untouched. Now days the common human being lives too fast paced. Just think of the present time. A long time ago we knew how to think of the long term impact of ways of life.</p> <p>Life there is no fast fix. This freeway to travel as stated at previous meetings. A 20-minute interval to get to point A to point B does not eliminate anything. A fast fix to life creates more problems you end up with a bigger mess than what you started with. I am against putting in a freeway through or by South Mountain. It’s a disruption to nature’s way of life.</p> <p>I feel ADOT discriminated against us all at the last public forum held in Komatke , Az. Gila River Indian Community members were not able to voice their public comments. No matter where the meetings are held. All parties whether you are against or for the freeway should be able to speak. No meeting should be one sided for any reason what so ever. That is very unfair. Again this is a fast fix to eliminate process that everyone should abide by. Good, bad, and Indifferent. Every comment counts. No one comment should be left unheard or unsaid.</p> <p></p> <p>Fairietta Morago</p> <p>P.O. Box 893</p> <p>Sacaton, AZ 85147</p> <p>(520) 562-0269</p>

Code	Issue	Response
80	Cultural Resources	The importance of the South Mountains Traditional Cultural Property is acknowledged on pages 4-130 and 4-141 of the Draft and Final Environmental Impact Statements, respectively. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. This consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Historic Preservation Act eligibility recommendations, project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.
	Purpose and Need	In the Draft and Final Environmental Impact Statements, Chapter 1, <i>Purpose and Need</i> , examines the purpose and need for the proposed action in terms of defining a transportation problem. The results of the purpose and need analyses included the determination that a transportation problem (similar to the type of problem that has been represented in past Regional Transportation Plans) still exists in the area and that this problem is similar in characteristics to the transportation problem that existed in prior years.
	Tribal Involvement	<p>The section entitled <i>Title VI and Environmental Justice</i>, beginning on page 4-29 in the Draft Environmental Impact Statement, presents acceptable methods, data, and assumptions to assess the potential for disproportionately high and adverse effects from the proposed action on environmental justice populations and disparate impacts to populations protected under Title VI. Based upon the content of the section, no such effects would result from the action alternatives.</p> <p>In light of comments received on the Draft Environmental Impact Statement, the above-referenced conclusions were confirmed in the preparation of the Final Environmental Impact Statement. To provide further clarity, the discussions of environmental justice and Title VI were separated and additional text explaining the relationship of environmental justice and Title VI to various environmental elements was added throughout Chapter 4, <i>Affected Environment, Environmental Consequences, and Mitigation</i>, as exemplified by the inserted text on page 4-29 of the Final Environmental Impact Statement.</p> <p>Chapter 2 of the Final Environmental Impact Statement is dedicated to the explanation of the Gila River Indian Community outreach undertaken for the project. Chapter 6 of the Final Environmental Impact Statement further describes Community outreach throughout the process. The Gila River Indian Community was provided equal opportunities to participate in the project as all other populations and agencies. This outreach was undertaken, in part, to ensure all populations had equal access to the process and, in part, to ensure disparate nor disproportionately high adverse impacts would result from the construction and operation of the proposed action.</p>

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81	<p>July 24, 2013</p>
	<p>Hello, my name is Lori Riddle. I am a daughter of the HoHoKam nation and a daughter of Antonio Azul, the last chief of my people. I am an enrolled member of the Gila River Indian Community. I was born here; I was raised here, lived here most of my life and will probably die here. In my lifetime, I've lived here in my territorial land and my confined reservation land, both in traditional manner and with modern conveniences. I was taught as a young girl how to gather, harvest and acquire foods and medicine for personal use. However I'm not a medicine person, a traditionalist or anything like that, I'm just a modern day O'odham woman who lives in 2 worlds and can balance both worlds. I pass this knowledge to my future generations. I am the co-founder, director and a member of GRACE (Gila River Alliance for a Clean Environment) a grassroots organization that has been, for more than a decade operating to protect my community from hazards of all types around the community. In addition, GRACE has been educating the community about subject matter surrounding those issues. I also sponsor a youth group GREY (Gila River Environmental Youth), who also does the same thing GRACE does but geared toward youth in the community. I'm also a member of various other groups and organizations, not to mention have had or currently hold seats on various committees, boards and commissions throughout the community. Finally, I am also a member of PARC (Protecting Arizona's Resources and Children).</p>
	<p>Sometime after the turn of the century events happened that set in motion my part of the equation. While being raised on the reservation I found myself living on a toxic superfund site. This began my environmental experience. I became knowledgeable of toxic substances, bio-accumulation, persistent organic pollutants, half-life and many other terms that kids such as myself shouldn't have to learn. As I translated information to my grandparents I began to find myself unknowingly being educated in the procedures used for assessment and abatement processes. I was present for the original remediation of my family's land and then again 20 years later when a bio-remediation was needed.</p> <p>With this knowledge and background I found locally, multiple issues in my community, one of them was the proposed South Mountain Loop 202. Taking a closer look I began to see the deficiencies in this project and notice that there was virtually no public participation. Consultation seemed minimal at best, if any? I began to look at the data for the substance releases and persistence of those substances. Ultimately, as any other project I looked at how these substances would impact Health and Human life. As a family who's been through the fire once, we've become quite aware of symptoms as a result of toxic exposure. In the documents submitted there is evidence and reference to some of the knowledge related to exposures. Back in the day of our exposure there wasn't enough information available.</p> <p>My concern about the Dioxin furans, the Particulate matter both 2.5 and 10 microns, Carbon monoxide and the multitude of other substances that would continually be present in our community is enormous. There is more concern because of the terrain and the natural makeup of our community. The heaviest impacted areas would be the populated villages located directly</p>


Code	Issue	Response
81	Tribal Involvement	<p>As noted in Chapter 2 of the Final Environmental Impact Statement, efforts to involve the Gila River Indian Community, a sovereign nation, in the environmental impact statement process are extensive. Public involvement with the Gila River Indian Community was conducted as requested by the tribal government. Prior to October 2005, early efforts to involve the Gila River Indian Community included attending tribal meetings and monthly meetings with Gila River Indian Community Departments (see discussion beginning on page 2-8 of the Draft and Final Environmental Impact Statements). On October 14, 2005, the Gila River Indian Community requested that all project-related communications take place at a government-to-government level (see letter on page A152 of Appendix 1-1). This request was honored by the Arizona Department of Transportation and Federal Highway Administration. All public involvement efforts were implemented by the Gila River Indian Community's public involvement officer.</p> <p>In addition to Chapter 2 of the Final Environmental Impact Statement which explains the Gila River Indian Community outreach undertaken for the project, Chapter 6 of the Final Environmental Impact Statement further describes Gila River Indian Community and general outreach throughout the process. The Gila River Indian Community was provided equal opportunities to participate in the project as all other populations and agencies. This outreach was undertaken, in part, to ensure all populations had equal access to the process and, in part, to ensure disparate nor disproportionately high adverse impacts would result from the construction and operation of the proposed action.</p>
	Air Quality	<p>The Final Environmental Impact Statement addresses the history of air quality in the region (see text beginning on page 4-68 of the Final Environmental Impact Statement). The Clean Air Act § 109(b)(1) requires the U.S. Environmental Protection Agency to promulgate primary National Ambient Air Quality Standards at levels that allow an adequate margin of safety to protect the public health. Air quality in the Phoenix metropolitan area has improved over time; Phoenix was redesignated to attainment/maintenance for carbon monoxide in 2005, and the U.S. Environmental Protection Agency recently determined that Phoenix has attained the particulate matter (PM₁₀) standard. These improvements are largely associated with cleaner fuels and lower-emission vehicles along with local controls on fugitive dust. Future emissions would also be reduced by the use of cleaner-burning fuels, technological advances in automotive design (including the greater use of alternative fuel vehicles), reformulated gasoline, gas can standards, stricter enforcement of emission standards during inspections, heavy-duty diesel engine and on-highway diesel sulfur control programs, dust control programs, and others.</p> <p>The air quality assessment for the proposed freeway analyzed impacts from carbon monoxide and particulate matter (PM₁₀) and followed U.S. Environmental Protection Agency guidelines. No violations of either the carbon monoxide or particulate matter (PM₁₀) standards were identified, even at worst-case locations along the project corridor. Thus, the carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones. For mobile source air toxics, the analysis showed that for the Study Area, constructing the freeway would have a marginal effect on annual emissions in 2025 and 2035 (less than a 1 percent difference in total annual emissions between the</p>

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82	<p>July 24, 2013</p> <p>between two natural barriers, the South Mountain and the Estrella Mountain ranges. These barriers would most definitely keep those toxic substances in my community.</p> <p>Currently, we have an amazing preserve that is full of the natural beauty that most Americans and people from all around the world picture when thinking of the well-known Sonoran desert. As a privileged individual, I've lived at the western tip of the South Mountain and seen many beautiful sunrises and given many blessings to the day and the people based on those gorgeous sunrises. In addition, while working for my community I have gained knowledge of aquifers, water sheds and washes that would be directly impacted.</p> <p>My people would be cut off from interactions with the mountain, as a third party recipient of this information I had heard that the engineers and designers have mentioned animal crossings that would be put in place but no mention of human crossings that would be needed to go pray and have ceremonies and such. Not to mention the distraction of noise from the vehicles. During prayer, it's important to be in a peaceful quiet area. I tasked my daughter to complete research; she found that it takes multiple generations for animals to learn their "new" crossings. During that learning time we lose numerous animals because of destruction of current natural known crossings. I have to mention about the cacti in the area, on the reservation the cacti grown more abundantly around and on mountain areas, not so much in the flat lands anymore. So naturally as we have our ceremonial harvesting activities, there is a greater need to gather the fruit in mountain areas. Lastly, we Akimel O'odham as many other peoples acknowledge the spiritual properties associated with mountains. It is in my O'odham sister's memory as with many of my O'odham sisters that I recall her making jellies and other delicious dishes for both personal and financial sustainability, yet another reason to have direct accessibility to the mountains.</p> <p>There is an enormous concern about Hazardous Material coming through our community. If this were to become "the" truck route, it most surely will be the hazardous material route. Since I sit on the CTERC (Chemical Tribal Emergency Response Commission), I have not seen hazard mitigation for this freeway. I also have not seen proposed policy to address what will happen in case a hazardous incident were to occur on this proposed freeway. Currently, we as a community do see our share of hazardous incidents/spills on the reservation by way of the I-10 (Interstate 10) freeway. Even though, when we look at potential incidents on either freeway, it will be apples and oranges as we have differences in the already established freeway (I-10) and the proposed freeway (I.202).</p> <p>There were very few meetings, very little public participation. The very first invite extended was days after the DEIS was released which was April 25th, 2013. The meeting invite was on April 30th, 2013 at 3pm in GRIC at the Governance Center.</p> <p>Present were the TTT, Governor and Lt Governor (who is Chair of the TTT), various tribal departments, a rep from ADOT (who I can't recall), a rep from MAG, Senior Engineer Bob Hazlett as well as a few of the grassroots organizers. Represented were at least organizers from</p>

Code	Issue	Response
81 (cont.)		Preferred Alternative and No-Action Alternative). With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions. The air quality analyses were updated for the Final Environmental Impact Statement, including a quantitative particulate matter (PM ₁₀) analysis, and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement. Congestion relief resulting from the proposed freeway would provide localized air quality emissions reductions on area freeways and arterial streets and at interchanges, benefiting users of area highways and those living near congested roads.
82	Biological Resources, Tribal Access	<p>Connectivity is planned to allow wildlife movement beneath the freeway in multiuse crossings (see page 4-137 of the Final Environmental Impact Statement). The Federal Highway Administration and Arizona Department of Transportation have committed to providing mitigation by including multifunctional crossing structures designed for wildlife and for limited human use as well as culverts designed for connectivity for smaller species. Wildlife-friendly design information would be considered during the design of drainage and crossing structures for the freeway (see <i>Mitigation</i>, beginning on page 4-138 of the Final Environmental Impact Statement). The Arizona Department of Transportation and Federal Highway Administration would continue to work with partners, including the U.S. Fish and Wildlife Service, Arizona Game and Fish Department, and the Gila River Indian Community's Department of Environmental Quality, during the design phase regarding the design of multifunctional crossings that would allow wildlife passage across the proposed freeway alignment at natural drainages and that would allow Gila River Indian Community members to gain access to important traditional locations within the South Mountains.</p> <p>The Arizona Department of Transportation and Federal Highway Administration have been fully attentive to concerns expressed by the Gila River Indian Community and reiterate that position in this comment; the agencies have taken these concerns into account in describing potential impacts in the Draft Environmental Impact Statement, in ensuring that access to South Mountain would be preserved, and in developing and recommending the implementation of numerous mitigation measures.</p>

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	<div>July 24, 2013</div> <p>5 groups. During this meeting we were given 3 copies of the DEIS to divide among our groups. A few days prior, a community member attempted to call to find out how to obtain a copy of the DEIS, she was told in order to get a hard copy she would have to pay 50.00 dollars. During the April 30th meeting they also advised us about the 50.00 dollar charge for hard copies. At this meeting they also told us that free bus service would be provided to the May 21st DEIS public comment hearing in Phoenix at the Phoenix Convention Center. Details about how the free bus rides to the hearing saying community members could catch the bus in two locations and even take the light rail, but no other details regarding the bus service were given. They also went through the scenario of what to expect at the hearing, how it would be set up, etc. At the beginning of the meeting the ground rules set as relayed by TTT’s David White and Stephen Lewis both individuals head of the TTT. We were not allowed to speak about anything else but what the process was going to be, at this point there wasn’t any mention that the Phoenix hearing would have some differences than the community forums. It was at this meeting where GRIC Lt Gov. had to officially request that a meeting (or two) be held in GRIC for community members that couldn’t make the public hearing. At this meeting the handouts “Fact sheet” and “How to participate” were distributed. That’s all I can recall.</p> <p>A few times I attempted to call the number provided on the handouts, which also had a recording saying they couldn’t receive any more messages, the box was full, or something to that effect. I had also heard similar accounts from other people who were attempting to call the number. On the Thursday before the hearing I started to get worried because there was no further mention of free transportation besides what was relayed to us during the April 30th meeting. I called the number provided and was able to have an opportunity to leave a voice message in which I said something to the effect of: Hello my name is Lori Riddle from the Gila River Indian Community and I’m trying to get some further information on bus service, passes or vouchers for my community members. How will this work? Would someone give me a call on my cell #520-610-3405, thank you?</p> <p>No Response!!!!</p> <p>So on the day of the Phoenix hearing May 21st, 2013 I lingered several hours. I only recognized Mr. Bob Hazlett from MAG, I approached Mr. Hazlett and asked him. “So who’s in charge here”? He chuckled but didn’t answer, I told him, “I ask because I have some concerns”. I told him there’s a problem with the number that it is always full and can’t take anymore new messages, his response, “Yes, we just found out today that it only holds so many messages (I think the number he gave me was 13)”. So I told him maybe they need to empty that a few times a day? The other thing I mentioned was that I had left a message on the number and relayed the message I had left the week prior. After that I said, “So how was this supposed to work? Because we could have gotten more tribal members present”. He shrugged his shoulders and said, “Well it’s too late now”. Also on the day of the Phoenix hearing the participants received the small booklet “SMTN Meeting Guide”. This was the first time we as community members</p>

Code	Issue	Response
82 (cont.)	Hazardous Material	Creating a truck bypass is not a goal of the proposed action. The proposed freeway is part of a transportation system developed to improve mobility in the region by increasing capacity and allowing traffic—including truck traffic—to access a segment of the “loop” system (see pages 1-21, 1-22, 3-1, and 3-3 of the Final Environmental Impact Statement) in the Phoenix metropolitan area. The proposed South Mountain Freeway would be a commuter corridor, helping to move local traffic. As with all other freeways in the region, trucks would use it for the through-transport of freight, for transport to and from distribution centers, and for transport to support local commerce. Nevertheless, the primary vehicles using the proposed freeway would be automobiles. The Maricopa Association of Governments regional travel demand model projects that truck traffic would represent approximately 10 percent of the total traffic on the proposed freeway, similar to what is currently experienced on other regional freeways such as Interstate 10, State Route 101L, and U.S. Route 60. As disclosed in the Final Environmental Impact Statement, it is expected that “true” through-truck traffic (not having to stop in the metropolitan area) would continue to use the faster, designated, and posted bypass system of Interstate 8 and State Route 85 (see

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	<p>July 24, 2013</p> <p>had seen this. The guide did say the community forums were going to be utilizing a different format. It also listed only 1 GRIC forum and listed it as tentative.</p> <p>The meeting in GRIC was short notice fliers went out to the community literally days before the event. Before this event at least three weeks prior one community organizer emailed a request urging GRIC to provide transport to community members to the meeting. There is a lack of community members without vehicles. No response. Lastly a few days before organizers and community voiced their concerns over the inability to voice, in open forum, their concerns at this meeting it was this time we saw the GRIC forum flyers for the first time. We additionally asked again if transport would be provided, they finally said yes, but we organizers had to provide a list of community members who needed transport. This was not expected, it was too short of notice to gather all that information. The day of the GRIC forum were community members dissatisfied the lack of inability to openly voice their concerns. The video was looped, as posted on ADOT’s website, throughout the day.</p> <p>Previously, While the TTT was going through the community with their presentation about the proposed loop 202 that I specifically TTT’s David White in two district meetings that I had attended one in district six and the other in district four. There were concerns about ADOT not coming to present the information themselves. The one elder in district six asked who they were working for? He (the elder) stated that he felt like the TTT should not have been presenting the information but ADOT should have been the ones bringing this information to the community. That same consensus was expressed at the district four meeting it was raised by an elder woman (although not as confrontational as the one in district six).</p> <p>In closing, I’m tired of fighting this monster of a freeway being pushed on to our community. I’m tired of reading blogs, comments to news articles and discussion forums of people with a “Bullying” attitude, telling my people what “You (Indians) need to do”. Even a newspaper editorial of a popular news outlet, stated how, “the GRIC should this and should that”! It sickens me that this freeway has successfully brought out the racial wars effect. It’s literally created debates, arguments and full blown fights! This needs to stop and other we need to work on discussions of cleaner transportation, safer technologies for a better cleaner, greener future for all our children.</p> <p> Lori Ann Riddle, GRACE GRID #11,180 P.O. Box 11217 Bapchule, Arizona 85121 Cell #520-610-3405 E-mail: contaminatedinaz@yahoo.com</p>

Code	Issue	Response
82 (cont.)		<p>page 3-64 of the Final Environmental Impact Statement).</p> <p>Arizona highways, as are most highways across the United States, are open to all kinds of traffic, so long as the cargo being carried is in accordance with U.S. Department of Transportation regulations for the specific type of cargo. The Arizona Department of Transportation has a few locations in the state with hazardous cargo restrictions, but these restrictions are based on emergency response issues or roadway design limitations specific to that location. For example, the Interstate 10 Deck Park Tunnel has certain hazardous cargo transport restrictions because of the limited ability for emergency responders to address a hazardous materials incident in the tunnel. The South Mountain Freeway, if implemented, is expected to operate under the same rules as other similar facilities in the state; transport of hazardous cargo would be expected to be permissible (see text box on page 4-164 of the Final Environmental Impact Statement).</p> <p>The Arizona Department of Public Safety (which includes the State Highway Patrol) has primary responsibility for enforcing traffic laws. The Department of Public Safety also has primacy when calling in support for traffic accidents, including hazardous materials accidents (see text box on page 4-164 of the Final Environmental Impact Statement). The Arizona Department of Transportation maintains a list of contractors who provide emergency response services, as well as local municipalities whose fire and police departments operate in cooperation with the Department of Public Safety on incidents within their jurisdiction. Requirements for shippers are maintained by the Arizona Department of Transportation’s Enforcement Compliance Division.</p>
	Tribal Involvement	<p>Arizona Department of Transportation advertisement efforts of the public hearing and public forums are documented in Chapter 6 of the Final Environmental Impact Statement beginning on page 6-23. The Gila River Indian Community Communication and Public Affairs Office informed the Arizona Department of Transportation that all communication and distribution of informational materials on Gila River Indian Community land would be handled by the Communication and Public Affairs Office. Advertisement text regarding the project, the public comment period, the public hearing and the various ways for the public to submit comments regarding the South Mountain Freeway Draft Environmental Impact Statement was given to the Gila River Indian Community’s Public Information Officer at the Transportation Technical Team meeting on April 30, 2013. Two advertisements regarding the public hearing, information regarding the location and availability of the Draft Environmental Impact Statement, and a map of the alternatives was placed in the May 2013 monthly issue of the <i>Gila River Indian News</i>.</p> <p>The Arizona Department of Transportation Community Relations distributed electronic notices (e-newsletters) through the Government Delivery system to over 12,000 constituents who voluntarily signed up for project alerts along the Interstate 10 Papago, Maricopa, and Santan Freeways. These electronic notices included notice of availability of Draft Environmental Impact Statement (distributed on April 26, 2013); public hearing (distributed on May 10, 2013); the community forums (distributed on May 29, 2013) and one in June (close of the Draft Environmental Impact Statement public comment period). In addition, anyone who had attended a previous meeting on the proposed action and signed in received all of this information mailed individually. On May 6, 2013, 73,564 mailers were distributed to addresses within the Study Area.</p>

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83	<p>7-8-13</p> <p>Hi my name is Stephanie J. Thomas and I'm a Gila River member. I reside in District 5 Casa Blanca and I lived here all my life and I've been hearing alot about what was going on with the South Mountain, if I had the transportation I be there at all meetings, and I've been praying keeping everyone in prayer. But most of all as I hear what's going on I don't like them trying to destroy the South Mountain, because its been there for years, and I really don't think they need to tear that down, because its been our favorite and as I can recall I've been up there with my family just to see the whole view of phoenix and the Gila River and its a good view that I knew most of the people who loved being up there and having picnics, and other the riding there horses. So I pray that this Mountain will stay Cause if we can live in this world they why??? Cant the Mountain stay. And as I use to live in Dist 6 we use to have have right access from the mountain on 51st boundary line and as I use to wake every morning going to school I would see the sun rising from there, and I know alot of people who lived</p>


Code	Issue	Response
82 (cont.)		<p>Community forums were held after the public hearing to further invite public comment.</p> <p>The public hearing for the proposed action was widely advertised. Newspaper ads in six newspapers of area-wide distribution ran advertisements at least twice each. Announcements occurred on five radio stations and six television stations. Mailers were sent on May 6, 2013 to 73,564 individuals (approximately 311 on the Gila River Indian Community) who had previously expressed an interest in the project. E-newsletters were distributed on three different occasions. All materials were also provided to the Gila River Indian Community Public Information Officer.</p> <p>Offers to the Gila River Indian Community Manager to host a public outreach event on the Gila River Indian Community began in summer 2012. The Gila River Indian Community first officially responded to this offer at the April 30, 2013 meeting of the Transportation Technical Team. During this meeting, the Gila River Indian Community Manager requested a community forum be conducted on the Gila River Indian Community following the public hearing. This was the only request the Arizona Department of Transportation received from the Gila River Indian Community regarding whether the Arizona Department of Transportation could hold a public outreach event during the public comment period. The Arizona Department of Transportation agreed to do so, and a community forum was held on June 22, 2013 at the Komatke Boys & Girls Club on the Gila River Indian Community. Like the public hearing, the community forums were widely advertised. In addition to the efforts of the Gila River Indian Community Communication and Public Affairs Office, the Arizona Department of Transportation ran newspaper ads in six newspapers of area-wide distribution four times each.</p> <p>The initial hotline capacity was 20 messages; it was expanded to 80 on May 17, 2013. Any questions that came in regarding how to participate, including any shuttle bus or transportation questions, were forwarded to one individual to address. Conversation record log sheets were kept for these efforts.</p> <p>For the first time in the State's history, a shuttle bus to the hearing was provided from six locations in the Phoenix area, including two on the Gila River Indian Community (Komatke Boys & Girls Club and the Governance Center in Sacaton). All ads provided telephone numbers and electronic contact information regarding information on the shuttle schedules and pick-up locations. Transportation to the community forums was not provided.</p> <p>As noted in Chapter 2 of the Final Environmental Impact Statement, efforts to involve the Gila River Indian Community in the environmental impact statement process are extensive. Public involvement with the Gila River Indian Community was conducted as requested by the tribal government. Prior to October 2005, early efforts to involve the Gila River Indian Community included attending tribal meetings and monthly meetings with Gila River Indian Community Departments (see discussion beginning on page 2-8 of the Draft and Final Environmental Impact Statements). On October 14, 2005, the Gila River Indian Community requested that all project-related communications take place at a government-to-government level (see letter on page A152 of Appendix 1-1). This request was honored by the Arizona Department of Transportation and Federal Highway Administration. All public involvement efforts were implemented by the Gila River Indian Community's public involvement officer.</p>

Code	Comment Document
	<p>around there know what I'm talking about and so many things you don't know what it means to us having the mountain there, and it won't be the same if it should to be gone. We don't need this freeway there it's just gonna call a lot of accidents there or other things I can't say. So once again please don't take our South Mountain away because it is sacred to us.</p> <p>Thank You Gila River Pima Stephanie Thomas Tribal # PO Box 10952 13762 Capchule Arizona 85101 (520) 610-6247</p>

Code	Issue	Response
83	Visual Impacts	Visual impacts to and from South Mountain are presented in the Final Environmental Impact Statement on page 4-167.
	Cultural Resources	<p>The importance of the South Mountains Traditional Cultural Property is acknowledged on pages 4-130 and 4-141 of the Draft and Final Environmental Impact Statements, respectively. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. This consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Historic Preservation Act eligibility recommendations, project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.</p> <p>The South Mountains would not be destroyed by the proposed freeway. Use of the mountains for the purposes of the proposed freeway represents two-tenths of one percent of the total mountain range. Since 1988, and as part of this environmental impact statement process, several measures have been undertaken and will be undertaken to further reduce effects on the mountains. These measures, including narrowing the design footprint, acquiring replacement land immediately adjacent to the mountains, and the provision of highway crossings, are outlined in text beginning on page 5-23 of the Final Environmental Impact Statement.</p>

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84	<p>I am Daniel Daron Hernandez I'm a Member to the Gila River Indian Community. our people have lived in the Valley for centuries, we are descendants of the Hu Hu Kam people. we have farmed this land for thousands of years. as we were growing up we were taught that our land was sacred and that we need to protect it at all cost. South Mountain park is one of our sacred mountains, at one time it had belonged to our community. I can sit here and talk about everything that I had learned growing up and but im not. I know that what we believe as the same Indian people aint the same as what you believe. you may see the mountain as a obstacle! but we see it as a refuge for our animals, a place where we can take our children and teach them our culture, it may not seem like alot but the Mountain means so much to our community.</p> <p>There are so many reasons that we don't want the 202 throw the mountain! Having this new Highway go throw means more pollution for our community. Because I am worried that my children will never</p>

Code	Issue	Response
84	Cultural Resources	The importance of the South Mountains Traditional Cultural Property is acknowledged on pages 4-130 and 4-141 of the Draft and Final Environmental Impact Statements, respectively. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. This consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Historic Preservation Act eligibility recommendations, project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.
	Biological Resources	Multiuse crossings would be provided for wildlife and to accommodate those members of the Gila River Indian Community who wish to gain access to areas of the South Mountains for ceremonies important for their culture (see Final Environmental Impact Statement page 4-160). In addition, as stated on page 5-27 of the Final Environmental Impact Statement, a right-of-way fence would limit access to these areas by freeway users, but allow Gila River Indian Community members to gain access to the area.
	Health Effects	<p>Under the Clean Air Act, the U.S. Environmental Protection Agency is responsible for establishing National Ambient Air Quality Standards to protect public health and the environment from adverse effects of air pollutants. Health effects from air pollutants are based on the concentration of the pollutants and the duration of exposure. Concentrations vary with distance from a roadway based on many factors, including background (or ambient) levels of pollution from all sources; the number, speed, and type of vehicles on the roadway; wind speed and direction; topography; and other factors. For the proposed freeway, the Federal Highway Administration conducted modeling for carbon monoxide and particulate matter (PM₁₀) using worst-case (most congested or highest traffic) modeling locations at discrete receptor locations around each analysis location (primarily residences near the interchanges). The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones.</p> <p>Mobile source air toxics can also have adverse health impacts, but the U.S. Environmental Protection Agency has not established National Ambient Air Quality Standards for these pollutants. As a result, the Federal Highway Administration analyzes these pollutants using emissions analyses. The mobile source air toxics emissions analysis for the Study Area found little difference in total annual emissions of mobile source air toxics emissions between the Preferred and No-Action Alternatives (less than a 1 percent difference) in 2025 and 2035. With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions.</p>

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	<p>Se Blue Skys, They will grow up with health problems from all the smog smog. there will be more accidents, more spills, and more problems for our community to worry about. We really don't need to put another problem for our children to worry about.</p> <p>Adot needs to know we don't want this freeway to go thru our South Mountain or thru our community. we don't need to destroy the Mountain, schools, homes and communities! the People Have Spoken No Prop 202!</p> <p>Daniel Hernandez #14479. P.O Box 832 Sacaton Az 85147 DanielDorianHernandez@gmail.com</p> 

Code	Issue	Response
84 (cont.)		<p>Many studies have investigated the prevalence of adverse health effects in the near-road environment. Given concerns about the possibility of air pollution exposure in the near-road environment, the Health Effects Institute has dedicated a number of research efforts toward investigating this issue. In November 2007, the Health Effects Institute published Special Report #16: Mobile-Source Air Toxics: A Critical Review of the Literature on Exposure and Health Effects. This report concluded that the cancer health effects attributable to mobile sources are difficult to discern because the majority of quantitative assessments are derived from occupational cohorts with high concentration exposures and because some cancer potency estimates are derived from animal models. In January 2010, the Health Effects Institute released Special Report #17, investigating the health effects of traffic-related air pollution. The goal of the research was to synthesize available information on the effects of traffic on health. Researchers looked at linkages between: 1) traffic emissions (at the tailpipe) with ambient air pollution in general, 2) concentrations of ambient pollutants with human exposure to pollutants from traffic, 3) exposure to pollutants from traffic with human-health effects and toxicological data, and 4) toxicological data with epidemiological associations. Overall, researchers felt that there was “sufficient” evidence for causality for the exacerbation of asthma. Evidence was “suggestive but not sufficient” for health outcomes such as cardiovascular mortality and others. Study authors also noted that past epidemiological studies may not provide an appropriate assessment of future health associations because vehicle emissions are decreasing over time. Finally, in 2011 three studies were published by the Health Effects Institute evaluating the potential for mobile source air toxics “hot spots.” In general, the authors confirmed that while highways are a source of air toxics, they were unable to find that highways were the only source of these pollutants. They determined that near-road exposures were often no different or no higher than background (or ambient) levels of exposure and, hence, no true hot spots were identified. These reports are available from the Health Effects Institute’s Web site at <healtheffects.org>. The Federal Highway Administration and U.S. Environmental Protection Agency provide financial support to the Health Effects Institute’s research work. Another source of information is the U.S. Environmental Protection Agency’s recently released report on Children’s Health and the Environment:</p> <p><i>The level of knowledge regarding the relationship between environmental exposures and health outcomes varies widely among the topics [presented in this report], and the inclusion of an indicator in the report does not necessarily imply a known relationship between environmental exposure and children’s health effects. The report provides data for selected children’s health conditions that warrant further research because the causes, including possible contributing environmental factors, are complex and not well understood at this point.</i></p>

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84 (cont.)		<p><i>In the case of asthma, researchers do not fully understand why children develop the condition. However, substantial evidence shows exposure to certain air pollutants, including particulate matter and ozone, can trigger symptoms in children who already have asthma. Although the report found the percentage of children reported to currently have asthma increased from 8.7 percent in 2001 to 9.4 percent in 2010 and that minority populations are particularly affected by asthma, the severity of children's asthma and respiratory symptoms has declined. The rate of emergency room visits for asthma decreased from 114 visits per 10,000 children in 1996 to 103 visits per 10,000 children in 2008. Between 1996 and 2008, hospitalizations for asthma and for all other respiratory causes decreased from 90 hospitalizations per 10,000 children to 56 hospitalizations per 10,000 children.</i></p> <p><i>The report also looks at trends in other health conditions, such as Attention-Deficit/Hyperactivity Disorder (ADHD) and preterm births, for which rates have increased. There is no conclusive information on the role of environmental contaminants in ADHD or preterm births, and additional research is ongoing.</i></p> <p>Finally, the Federal Highway Administration notes that while the incidence of some health effects (such as asthma, autism, and attention deficit/hyperactivity disorder) in the U.S. population appear to have been increasing, motor vehicle emissions have declined. This decline in mobile source air toxics emissions is documented in Figure 4-24 of the Final Environmental Impact Statement and for other pollutants at <epa.gov/ttn/chief/trends/>. This negative correlation between emissions trends and health effects trends illustrates the complexity of the issues.</p>
	Hazardous Materials	<p>Arizona highways, as are most highways across the United States, are open to all kinds of traffic, so long as the cargo being carried is in accordance with U.S. Department of Transportation regulations for the specific type of cargo. The Arizona Department of Transportation has a few locations in the state with hazardous cargo restrictions, but these restrictions are based on emergency response issues or roadway design limitations specific to that location. For example, the Interstate 10 Deck Park Tunnel has certain hazardous cargo transport restrictions because of the limited ability for emergency responders to address a hazardous materials incident in the tunnel. The South Mountain Freeway, if implemented, is expected to operate under the same rules as other similar facilities in the state; truck traffic would be expected to be permissible (see the text box on page 4-166 of the Final Environmental Impact Statement).</p>

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85	<p>7-8-13</p> <p>My Name is Laverne Thomas I am an enrolled Member of the GRIIC. I wanted to tell someone of how little information has been given to us people here we need to protect the South Mountain because that mountain is sacred to our people. We still gather needed items even now. I guess that all I can say for now.</p> <p>Laverne Thomas 6394 P.O. Box 11421 Bapchule, AZ 85121 (520) 315-2275</p>

(Comment code 86 is on next page)

Code	Issue	Response
85	Cultural Resources	The importance of the South Mountains Traditional Cultural Property is acknowledged on pages 4-130 and 4-141 of the Draft and Final Environmental Impact Statements, respectively. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. This consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Historic Preservation Act eligibility recommendations, project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.
	Tribal Involvement	<p>As noted in Chapter 2 of the Final Environmental Impact Statement, efforts to involve the Gila River Indian Community, a sovereign nation, in the environmental impact statement process are extensive. Public involvement with the Gila River Indian Community was conducted as requested by the tribal government. Prior to October 2005, early efforts to involve the Gila River Indian Community included attending tribal meetings and monthly meetings with Gila River Indian Community Departments (see discussion beginning on page 2-8 of the Draft and Final Environmental Impact Statements). On October 14, 2005, the Gila River Indian Community requested that all project-related communications take place at a government-to-government level (see letter on page A152 of Appendix 1-1). This request was honored by the Arizona Department of Transportation and Federal Highway Administration. All public involvement efforts were implemented by the Gila River Indian Community's public involvement officer.</p> <p>In addition to Chapter 2 of the Final Environmental Impact Statement which explains the Gila River Indian Community, a sovereign nation, outreach undertaken for the project, Chapter 6 of the Final Environmental Impact Statement further describes Gila River Indian Community and general outreach throughout the process. The Gila River Indian Community was provided equal opportunities to participate in the project as all other populations and agencies. This outreach was undertaken, in part, to ensure all populations had equal access to the process and, in part, to ensure disparate nor disproportionately high adverse impacts would result from the construction and operation of the proposed action.</p>
86	Cultural Resources	The importance of the South Mountains Traditional Cultural Property is acknowledged on pages 4-130 and 4-141 of the Draft and Final Environmental Impact Statements, respectively. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. This consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Historic Preservation Act eligibility recommendations, project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.

Code	Comment Document
86	<p>Hello, 6-29-13</p> <p>My name is Nicole Johns and I am a Gila River Indian Community member. I am stating that my connection to South Mountain is that it is a very sacred sacred place to me and my people.</p> <p>I would also like to say that ADOT did not properly notify every one in our community about the meetings they have had about South Mountain.</p> <p>I myself have not heard anything about these meetings until they ^{until they} have already passed. They don't make it easy for me to get to these meetings that they have. I don't have transportation to go in to the city or to the far west end of our reservation. I would like to add that it would be more convenient if they would have went to each district and asked each of us how we felt about this.</p> <p>The health concerns I have about this project are that the exhaust would kill plant life that has been there for hundreds of years and can & will be a health hazard for the people that live near</p>

Code	Issue	Response
86 (cont.)	Tribal Involvement	<p>Arizona Department of Transportation advertisement efforts of the public hearing and public forums are documented in Chapter 6 of the Final Environmental Impact Statement beginning on page 6-23. The Gila River Indian Community Communication and Public Affairs Office informed the Arizona Department of Transportation that all communication and distribution of informational materials on Gila River Indian Community land would be handled by the Communication and Public Affairs Office. Advertisement text regarding the project, the public comment period, the public hearing and the various ways for the public to submit comments regarding the South Mountain Freeway Draft Environmental Impact Statement was given to the Gila River Indian Community's Public Information Officer at the Transportation Technical Team meeting on April 30, 2013. Two advertisements regarding the public hearing, information regarding the location and availability of the Draft Environmental Impact Statement, and a map of the alternatives was placed in the May 2013 monthly issue of the <i>Gila River Indian News</i>.</p> <p>The Arizona Department of Transportation Community Relations distributed electronic notices (e-newsletters) through the Government Delivery system to over 12,000 constituents who voluntarily signed up for project alerts along the Interstate 10 Papago, Maricopa, and Santan Freeways. These electronic notices included notice of availability of Draft Environmental Impact Statement (distributed on April 26, 2013); public hearing (distributed on May 10, 2013); the community forums (distributed on May 29, 2013) and one in June (close of the Draft Environmental Impact Statement public comment period). In addition, anyone who had attended a previous meeting on the proposed action and signed in received all of this information mailed individually. On May 6, 2013, 73,564 mailers were distributed to addresses within the Study Area.</p> <p>The Arizona Department of Transportation provided vouchers for public hearing parking and for public transit to the hearing. For the first time in the State's history, a shuttle bus to the hearing was provided from six locations in the Phoenix area, including two on the Gila River Indian Community (Komatke Boys & Girls Club and the Governance Center in Sacaton). All ads provided telephone numbers and electronic contact information regarding information on the shuttle schedules and pick-up locations.</p> <p>As noted in Chapter 2 of the Final Environmental Impact Statement, efforts to involve the Gila River Indian Community in the environmental impact statement process are extensive. Public involvement with the Gila River Indian Community was conducted as requested by the tribal government. Prior to October 2005, early efforts to involve the Gila River Indian Community included attending tribal meetings and monthly meetings with Gila River Indian Community Departments (see discussion beginning on page 2-8 of the Draft and Final Environmental Impact Statements). On October 14, 2005, the Gila River Indian Community requested that all project-related communications take place at a government-to-government level (see letter on page A152 of Appendix 1-1). This request was honored by the Arizona Department of Transportation and Federal Highway Administration. All public involvement efforts were implemented by the Gila River Indian Community's public involvement officer.</p>

Code	Comment Document
	<p>and around the Freeway.</p> <p>May I add that A.D.O.T. did not ask in proper manners what we as a community would like done or not done with our sacred place of gathering.</p> <p>Thank You, Nicole Johns Gila River Indian Community Member #17102 360) 340-1908 or 418-1469 nicolejohns41@yahoo.com Nicole Johns</p>

Code	Issue	Response
86 (cont.)	Biology, Plants, and Wildlife	Within the context of overall vegetation, wildlife, and wildlife habitat, all action alternatives and options would decrease the amount of cover, nesting areas, and food resources for wildlife species caused by habitat loss, fragmentation, and traffic disturbance. See the section, <i>General Impacts on Vegetation, Wildlife, and Wildlife Habitat</i> , beginning on page 4-136 of the Final Environmental Impact Statement, for additional details on potential effects on vegetation, wildlife, and wildlife habitat.
	Health Effects	<p>Under the Clean Air Act, the U.S. Environmental Protection Agency is responsible for establishing National Ambient Air Quality Standards to protect public health and the environment from adverse effects of air pollutants. Health effects from air pollutants are based on the concentration of the pollutants and the duration of exposure. Concentrations vary with distance from a roadway based on many factors, including background (or ambient) levels of pollution from all sources; the number, speed, and type of vehicles on the roadway; wind speed and direction; topography; and other factors. For the proposed freeway, the Federal Highway Administration conducted modeling for carbon monoxide and particulate matter (PM₁₀) using worst-case (most congested or highest traffic) modeling locations at discrete receptor locations around each analysis location (primarily residences near the interchanges). The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones.</p> <p>Mobile source air toxics can also have adverse health impacts, but the U.S. Environmental Protection Agency has not established National Ambient Air Quality Standards for these pollutants. As a result, the Federal Highway Administration analyzes these pollutants using emissions analyses. The mobile source air toxics emissions analysis for the Study Area found little difference in total annual emissions of mobile source air toxics emissions between the Preferred and No-Action Alternatives (less than a 1 percent difference) in 2025 and 2035. With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions.</p> <p>Many studies have investigated the prevalence of adverse health effects in the near-road environment. Given concerns about the possibility of air pollution exposure in the near-road environment, the Health Effects Institute has dedicated a number of research efforts toward investigating this issue. In November 2007, the Health Effects Institute published Special Report #16: Mobile-Source Air Toxics: A Critical Review of the Literature on Exposure and Health Effects. This report concluded that the cancer health effects attributable to mobile sources are difficult to discern because the majority of quantitative assessments are derived from occupational cohorts with high concentration exposures and because some cancer potency estimates are derived from animal models. In January 2010, the Health Effects Institute released Special Report #17, investigating the health effects of traffic-related air pollution. The goal of the research was to synthesize available information on the effects of traffic on health. Researchers looked at linkages between: 1) traffic emissions (at the tailpipe) with ambient air pollution in general, 2) concentrations of ambient pollutants with human exposure to pollutants from traffic, 3) exposure to pollutants from traffic with human-health effects and toxicological data, and 4) toxicological data with epidemiological associations.</p>

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Code	Issue	Response
86 (cont.)		<p>Overall, researchers felt that there was “sufficient” evidence for causality for the exacerbation of asthma. Evidence was “suggestive but not sufficient” for health outcomes such as cardiovascular mortality and others. Study authors also noted that past epidemiological studies may not provide an appropriate assessment of future health associations because vehicle emissions are decreasing over time. Finally, in 2011 three studies were published by the Health Effects Institute evaluating the potential for mobile source air toxics “hot spots.” In general, the authors confirmed that while highways are a source of air toxics, they were unable to find that highways were the only source of these pollutants. They determined that near-road exposures were often no different or no higher than background (or ambient) levels of exposure and, hence, no true hot spots were identified. These reports are available from the Health Effects Institute’s Web site at <healtheffects.org>. The Federal Highway Administration and U.S. Environmental Protection Agency provide financial support to the Health Effects Institute’s research work. Another source of information is the U.S. Environmental Protection Agency’s recently released report on Children’s Health and the Environment:</p> <p><i>The level of knowledge regarding the relationship between environmental exposures and health outcomes varies widely among the topics [presented in this report], and the inclusion of an indicator in the report does not necessarily imply a known relationship between environmental exposure and children’s health effects. The report provides data for selected children’s health conditions that warrant further research because the causes, including possible contributing environmental factors, are complex and not well understood at this point.</i></p> <p><i>In the case of asthma, researchers do not fully understand why children develop the condition. However, substantial evidence shows exposure to certain air pollutants, including particulate matter and ozone, can trigger symptoms in children who already have asthma. Although the report found the percentage of children reported to currently have asthma increased from 8.7 percent in 2001 to 9.4 percent in 2010 and that minority populations are particularly affected by asthma, the severity of children’s asthma and respiratory symptoms has declined. The rate of emergency room visits for asthma decreased from 114 visits per 10,000 children in 1996 to 103 visits per 10,000 children in 2008. Between 1996 and 2008, hospitalizations for asthma and for all other respiratory causes decreased from 90 hospitalizations per 10,000 children to 56 hospitalizations per 10,000 children.</i></p> <p><i>The report also looks at trends in other health conditions, such as Attention-Deficit/Hyperactivity Disorder (ADHD) and preterm births, for which rates have increased. There is no conclusive information on the role of environmental contaminants in ADHD or preterm births, and additional research is ongoing.</i></p> <p>Finally, the Federal Highway Administration notes that while the incidence of some health effects (such as asthma, autism, and attention deficit/hyperactivity disorder) in the U.S. population appear to have been increasing, motor vehicle emissions have declined. This decline in mobile source air toxics emissions is documented in Figure 4-24 of the Final Environmental Impact Statement and for other pollutants at <epa.gov/ttn/chief/trends/>. This negative correlation between emissions trends and health effects trends illustrates the complexity of the issues.</p>

Code	Comment Document
87	<p>7-3-13</p> <p>HELLO MY NAME IS BEONKA THOMAS AND I AM FROM THE GILA RIVER COMMUNITY I AM WRITING THIS LETTER BECAUSE I FELT LIKE I DID NOT GET SOLE NOTIFICATION ABOUT METTINGS. I FEEL THESE ARE IMPORTANT METTINGS TO BE PART OF ARE PEOPLE FEEL THAT THE MOUNTAIN IS A SACRED PLACE AND WE SHOULD RESPECT IT I HAVE A SMALL CHILD AND I DONT WANT HIM TO SICK FROM THE POLLUTION. I FEEL THAT THE FREEWAY WOULD BE TAKEN SOMETHING AWAY FROM OUR PEOPLE AND ANCESTORS.</p> <p>BEONKA THOMAS 4Buenker (Thomas) 20587# (520) 610-6247</p> <p>PO BOX 10952 BAPTISTE ARIZONA 85721</p>

Code	Issue	Response
87	Tribal Involvement	<p>Arizona Department of Transportation advertisement efforts of the public hearing and public forums are documented in Chapter 6 of the Final Environmental Impact Statement beginning on page 6-23. The Gila River Indian Community Communication and Public Affairs Office informed the Arizona Department of Transportation that all communication and distribution of informational materials on Gila River Indian Community land would be handled by the Communication and Public Affairs Office. Advertisement text regarding the project, the public comment period, the public hearing and the various ways for the public to submit comments regarding the South Mountain Freeway Draft Environmental Impact Statement was given to the Gila River Indian Community's Public Information Officer at the Transportation Technical Team meeting on April 30, 2013. Two advertisements regarding the public hearing, information regarding the location and availability of the Draft Environmental Impact Statement, and a map of the alternatives was placed in the May 2013 monthly issue of the <i>Gila River Indian News</i>.</p> <p>The Arizona Department of Transportation Community Relations distributed electronic notices (e-newsletters) through the Government Delivery system to over 12,000 constituents who voluntarily signed up for project alerts along the Interstate 10 Papago, Maricopa, and Santan Freeways. These electronic notices included notice of availability of Draft Environmental Impact Statement (distributed on April 26, 2013); public hearing (distributed on May 10, 2013); the community forums (distributed on May 29, 2013) and one in June (close of the Draft Environmental Impact Statement public comment period). In addition, anyone who had attended a previous meeting on the proposed action and signed in received all of this information mailed individually. On May 6, 2013, 73,564 mailers were distributed to addresses within the Study Area.</p> <p>The public hearing for the proposed action was widely advertised. Newspaper advertisements in six newspapers of area-wide distribution ran at least twice each. Announcements occurred on five radio stations and six television stations. Mailers were sent on May 6, 2013, to 73,564 individuals (approximately 311 on the Gila River Indian Community) who had previously expressed an interest in the project. E-newsletters were distributed on three different occasions. All materials were also provided to the Gila River Indian Community Public Information Officer. Offers to the Gila River Indian Community Manager to host a public outreach events on the Gila River Indian Community began in summer 2012. The Gila River Indian Community first officially responded to this offer at the April 30, 2013, meeting of the Transportation Technical Team. During this meeting, the Gila River Indian Community Manager requested that a community forum be conducted on the Gila River Indian Community following the public hearing. This was the only request the Arizona Department of Transportation received from the Gila River Indian Community regarding whether the Arizona Department of Transportation could hold a public outreach event during the public comment period. The Arizona Department of Transportation agreed to do so, and a community forum was held on June 22, 2013, at the Komatke Boys & Girls Club on the Gila River Indian Community.</p>

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87 (cont.)	Health Effects	<p>Under the Clean Air Act, the U.S. Environmental Protection Agency is responsible for establishing National Ambient Air Quality Standards to protect public health and the environment from adverse effects of air pollutants. Health effects from air pollutants are based on the concentration of the pollutants and the duration of exposure. Concentrations vary with distance from a roadway based on many factors, including background (or ambient) levels of pollution from all sources; the number, speed, and type of vehicles on the roadway; wind speed and direction; topography; and other factors. For the proposed freeway, the Federal Highway Administration conducted modeling for carbon monoxide and particulate matter (PM₁₀) using worst-case (most congested or highest traffic) modeling locations at discrete receptor locations around each analysis location (primarily residences near the interchanges). The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones.</p> <p>Mobile source air toxics can also have adverse health impacts, but the U.S. Environmental Protection Agency has not established National Ambient Air Quality Standards for these pollutants. As a result, the Federal Highway Administration analyzes these pollutants using emissions analyses. The mobile source air toxics emissions analysis for the Study Area found little difference in total annual emissions of mobile source air toxics emissions between the Preferred and No-Action Alternatives (less than a 1 percent difference) in 2025 and 2035. With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions.</p> <p>Many studies have investigated the prevalence of adverse health effects in the near-road environment. Given concerns about the possibility of air pollution exposure in the near-road environment, the Health Effects Institute has dedicated a number of research efforts toward investigating this issue. In November 2007, the Health Effects Institute published Special Report #16: Mobile-Source Air Toxics: A Critical Review of the Literature on Exposure and Health Effects. This report concluded that the cancer health effects attributable to mobile sources are difficult to discern because the majority of quantitative assessments are derived from occupational cohorts with high concentration exposures and because some cancer potency estimates are derived from animal models. In January 2010, the Health Effects Institute released Special Report #17, investigating the health effects of traffic-related air pollution. The goal of the research was to synthesize available information on the effects of traffic on health. Researchers looked at linkages between: 1) traffic emissions (at the tailpipe) with ambient air pollution in general, 2) concentrations of ambient pollutants with human exposure to pollutants from traffic, 3) exposure to pollutants from traffic with human-health effects and toxicological data, and 4) toxicological data with epidemiological associations.</p>

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Code	Issue	Response
87 (cont.)		<p>Overall, researchers felt that there was “sufficient” evidence for causality for the exacerbation of asthma. Evidence was “suggestive but not sufficient” for health outcomes such as cardiovascular mortality and others. Study authors also noted that past epidemiological studies may not provide an appropriate assessment of future health associations because vehicle emissions are decreasing over time. Finally, in 2011 three studies were published by the Health Effects Institute evaluating the potential for mobile source air toxics “hot spots.” In general, the authors confirmed that while highways are a source of air toxics, they were unable to find that highways were the only source of these pollutants. They determined that near-road exposures were often no different or no higher than background (or ambient) levels of exposure and, hence, no true hot spots were identified. These reports are available from the Health Effects Institute’s Web site at <healtheffects.org>. The Federal Highway Administration and U.S. Environmental Protection Agency provide financial support to the Health Effects Institute’s research work. Another source of information is the U.S. Environmental Protection Agency’s recently released report on Children’s Health and the Environment:</p> <p><i>The level of knowledge regarding the relationship between environmental exposures and health outcomes varies widely among the topics [presented in this report], and the inclusion of an indicator in the report does not necessarily imply a known relationship between environmental exposure and children’s health effects. The report provides data for selected children’s health conditions that warrant further research because the causes, including possible contributing environmental factors, are complex and not well understood at this point.</i></p> <p><i>In the case of asthma, researchers do not fully understand why children develop the condition. However, substantial evidence shows exposure to certain air pollutants, including particulate matter and ozone, can trigger symptoms in children who already have asthma. Although the report found the percentage of children reported to currently have asthma increased from 8.7 percent in 2001 to 9.4 percent in 2010 and that minority populations are particularly affected by asthma, the severity of children’s asthma and respiratory symptoms has declined. The rate of emergency room visits for asthma decreased from 114 visits per 10,000 children in 1996 to 103 visits per 10,000 children in 2008. Between 1996 and 2008, hospitalizations for asthma and for all other respiratory causes decreased from 90 hospitalizations per 10,000 children to 56 hospitalizations per 10,000 children.</i></p> <p><i>The report also looks at trends in other health conditions, such as Attention-Deficit/Hyperactivity Disorder (ADHD) and preterm births, for which rates have increased. There is no conclusive information on the role of environmental contaminants in ADHD or preterm births, and additional research is ongoing.</i></p> <p>Finally, the Federal Highway Administration notes that while the incidence of some health effects (such as asthma, autism, and attention deficit/hyperactivity disorder) in the U.S. population appear to have been increasing, motor vehicle emissions have declined. This decline in mobile source air toxics emissions is documented in Figure 4-24 of the Final Environmental Impact Statement and for other pollutants at <epa.gov/ttn/chief/trends/>. This negative correlation between emissions trends and health effects trends illustrates the complexity of the issues.</p>

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88	<p>7-2-13</p> <p>Frances Frances Stevens, I am 13 years old, I am a Gila River Indian Community member and a member of G.R.E.Y. (Gila River Environmental Youth)</p> <p>I'm against the freeway to be built, because the the pollution will make us sick also destroy our plant lifes, In the future even make our animals die or get sick.</p> <p>First First of all, I really don't don't like the idea of this freeway/loop 202, because it can ruin our lifes in the future, make us very sick. what I'm saying is that we have enough of pollution on the reservations, we don't need more pollution to ruin our future families.</p> <p>Second Second of all, the pollution will destroy our plants/crops that we make a living on, also our trees! we need our trees.</p> <p>The last The last thing I would like to talk about is why weren't there transportation transportation given to the community.</p>

Code	Issue	Response
87 (cont.)	Cultural Resources	The importance of the South Mountains Traditional Cultural Property is acknowledged on pages 4-130 and 4-141 of the Draft and Final Environmental Impact Statements, respectively. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. This consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Historic Preservation Act eligibility recommendations, project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.
88	Biology, Plants, and Wildlife	Within the context of overall vegetation, wildlife, and wildlife habitat, all action alternatives and options would decrease the amount of cover, nesting areas, and food resources for wildlife species caused by habitat loss, fragmentation, and traffic disturbance. See the section, <i>General Impacts on Vegetation, Wildlife, and Wildlife Habitat</i> , beginning on page 4-136 of the Final Environmental Impact Statement, for additional details on potential effects on vegetation, wildlife, and wildlife habitat. The Arizona Department of Transportation and Federal Highway Administration completed a Biological Evaluation containing analysis of the project effects on listed and candidate species under the Endangered Species Act. The Biological Evaluation was completed in 2014 following identification of the Preferred Alternative in the Draft Environmental Impact Statement. The Biological Evaluation was sent to the U.S. Fish and Wildlife Service, Arizona Game and Fish Department, and Gila River Indian Community Department of Environmental Quality for technical assistance with assessing the level of project effects on listed and candidate species prior to completion of the Final Environmental Impact Statement. The Arizona Department of Transportation and Federal Highway Administration have committed to continue coordination with the Arizona Game and Fish Department, Gila River Indian Community Department of Environmental Quality, and U.S. Fish and Wildlife Service regarding wildlife concerns as a result of the freeway's potential implementation. The results of the Biological Evaluation may be found beginning on page 4-125 of the Final Environmental Impact Statement.
	Air Quality, Health Effects	As noted on page 4-69 of the Final Environmental Impact Statement, secondary air quality standards are promulgated to minimize environmental and property damage. Primary and secondary standards for particulate matter (PM ₁₀) are identical; no threshold is established by the U.S. Environmental Protection Agency for carbon monoxide (CO). Under the Clean Air Act, the U.S. Environmental Protection Agency is responsible for establishing National Ambient Air Quality Standards to protect public health and the environment from adverse effects of air pollutants. Health effects from air pollutants are based on the concentration of the pollutants and the duration of exposure. Concentrations vary with distance from a roadway based on many factors, including background (or ambient) levels of pollution from all sources; the number, speed, and type of vehicles on the roadway; wind speed and direction; topography; and other factors. For the proposed freeway, the Federal Highway Administration conducted modeling for carbon monoxide and particulate matter (PM ₁₀) using worst-case (most congested or highest traffic) modeling locations at discrete receptor locations around each analysis location (primarily residences near the interchanges). The carbon monoxide and particulate matter (PM ₁₀) analyses

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	<div><div><div><div><div><div></div></div></div><div><div><div></div><div></div></div></div><div><div><div></div></div></div></div></div></div> <div><div>for the of meetings, the you should know that some of the community members would like to attend attend the meetings but have no ride to attend. So please listen to us and hear what we have to say. the</div><div>Frances Stevens</div></div>

Code	Issue	Response
88 (cont.)		<p>demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones</p> <p>Mobile source air toxics can also have adverse health impacts, but the U.S. Environmental Protection Agency has not established National Ambient Air Quality Standards for these pollutants. As a result, the Federal Highway Administration analyzes these pollutants using emissions analyses. The mobile source air toxics emissions analysis for the Study Area found little difference in total annual emissions of mobile source air toxics emissions between the Preferred and No-Action Alternatives (less than a 1 percent difference) in 2025 and 2035. With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions.</p> <p>Many studies have investigated the prevalence of adverse health effects in the near-road environment. Given concerns about the possibility of air pollution exposure in the near-road environment, the Health Effects Institute has dedicated a number of research efforts toward investigating this issue. In November 2007, the Health Effects Institute published Special Report #16: Mobile-Source Air Toxics: A Critical Review of the Literature on Exposure and Health Effects. This report concluded that the cancer health effects attributable to mobile sources are difficult to discern because the majority of quantitative assessments are derived from occupational cohorts with high concentration exposures and because some cancer potency estimates are derived from animal models. In January 2010, the Health Effects Institute released Special Report #17, investigating the health effects of traffic-related air pollution. The goal of the research was to synthesize available information on the effects of traffic on health. Researchers looked at linkages between: 1) traffic emissions (at the tailpipe) with ambient air pollution in general, 2) concentrations of ambient pollutants with human exposure to pollutants from traffic, 3) exposure to pollutants from traffic with human-health effects and toxicological data, and 4) toxicological data with epidemiological associations.</p> <p>Overall, researchers felt that there was “sufficient” evidence for causality for the exacerbation of asthma. Evidence was “suggestive but not sufficient” for health outcomes such as cardiovascular mortality and others. Study authors also noted that past epidemiological studies may not provide an appropriate assessment of future health associations because vehicle emissions are decreasing over time. Finally, in 2011 three studies were published by the Health Effects Institute evaluating the potential for mobile source air toxics “hot spots.” In general, the authors confirmed that while highways are a source of air toxics, they were unable to find that highways were the only source of these pollutants. They determined that near-road exposures were often no different or no higher than background (or ambient) levels of exposure and, hence, no true hot spots were identified. These reports are available from the Health Effects Institute’s Web site at <healtheffects.org>. The Federal Highway Administration and U.S. Environmental Protection Agency provide financial support to the Health Effects Institute’s research work.</p>

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88 (cont.)		<p>Another source of information is the U.S. Environmental Protection Agency’s recently released report on Children’s Health and the Environment:</p> <p><i>The level of knowledge regarding the relationship between environmental exposures and health outcomes varies widely among the topics [presented in this report], and the inclusion of an indicator in the report does not necessarily imply a known relationship between environmental exposure and children’s health effects. The report provides data for selected children’s health conditions that warrant further research because the causes, including possible contributing environmental factors, are complex and not well understood at this point.</i></p> <p><i>In the case of asthma, researchers do not fully understand why children develop the condition. However, substantial evidence shows exposure to certain air pollutants, including particulate matter and ozone, can trigger symptoms in children who already have asthma. Although the report found the percentage of children reported to currently have asthma increased from 8.7 percent in 2001 to 9.4 percent in 2010 and that minority populations are particularly affected by asthma, the severity of children’s asthma and respiratory symptoms has declined. The rate of emergency room visits for asthma decreased from 114 visits per 10,000 children in 1996 to 103 visits per 10,000 children in 2008. Between 1996 and 2008, hospitalizations for asthma and for all other respiratory causes decreased from 90 hospitalizations per 10,000 children to 56 hospitalizations per 10,000 children.</i></p> <p><i>The report also looks at trends in other health conditions, such as Attention-Deficit/Hyperactivity Disorder (ADHD) and preterm births, for which rates have increased. There is no conclusive information on the role of environmental contaminants in ADHD or preterm births, and additional research is ongoing.</i></p> <p>Finally, the Federal Highway Administration notes that while the incidence of some health effects (such as asthma, autism, and attention deficit/hyperactivity disorder) in the U.S. population appear to have been increasing, motor vehicle emissions have declined. This decline in mobile source air toxics emissions is documented in Figure 4-24 of the Final Environmental Impact Statement and for other pollutants at <epa.gov/ttn/chief/trends/>. This negative correlation between emissions trends and health effects trends illustrates the complexity of the issues.</p>
	Tribal involvement	<p>The Arizona Department of Transportation provided vouchers for public hearing parking and for public transit to the hearing. For the first time in the State’s history, a shuttle bus to the hearing was provided from six locations in the Phoenix area, including two on the Gila River Indian Community (Komatke Boys & Girls Club and the Governance Center in Sacaton). All ads provided telephone numbers and electronic contact information regarding information on the shuttle schedules and pick-up locations.</p>

Code	Comment Document
91	<p style="text-align: right;">7/2/13</p> <p>To whom it may concern,</p> <p>My name is Beradette Stearns. I am an enrolled member of the Gila River Reservation. I am a Pima / Apache residing in District 3.</p> <p>All and most of my life I have lived on the reservation. I originally grew up in District 3. I left the reservation a few years to another reservation out of state. As I returned back to the reservation I finished grade school and went to boarding school. By that time I learned my parents and family had moved to the West end of the reservation. There I had lived to grow into my adult hood.</p> <p>So today as I hear about this project being built. It saddens me to know that they are so persistent to build this Freeway. I guess because thats all that Range is there for. All of this saddens me to hear all the stuff that everyone is going through. As for myself. I care much for my people. And with this project in place. I know there will be alot of health issues. As I lived on the West End. I use to do alot of running along the gas line. I also use to climb the mountain.</p>

Code	Issue	Response
89	Purpose and Need	<p>In the Draft and Final Environmental Impact Statements, Chapter 1, <i>Purpose and Need</i>, examines the purpose and need for the proposed action in terms of defining a transportation problem. The results of the purpose and need analyses included the determination that a transportation problem (similar to the type of problem that has been represented in past Regional Transportation Plans) still exists in the area and that this problem is similar in characteristics to the transportation problem that existed in prior years. The alternatives analyses considered numerous modal alternatives, and a robust screening process led to the conclusion that a road facility would best address the transportation problem defined.</p>
	Health Effects	<p>As noted on page 4-69 of the Final Environmental Impact Statement, secondary air quality standards are promulgated to minimize environmental and property damage. Primary and secondary standards for particulate matter (PM₁₀) are identical; no threshold is established by the U.S. Environmental Protection Agency for carbon monoxide (CO).</p> <p>Under the Clean Air Act, the U.S. Environmental Protection Agency is responsible for establishing National Ambient Air Quality Standards to protect public health and the environment from adverse effects of air pollutants. Health effects from air pollutants are based on the concentration of the pollutants and the duration of exposure. Concentrations vary with distance from a roadway based on many factors, including background (or ambient) levels of pollution from all sources; the number, speed, and type of vehicles on the roadway; wind speed and direction; topography; and other factors. For the proposed freeway, the Federal Highway Administration conducted modeling for carbon monoxide and particulate matter (PM₁₀) using worst-case (most congested or highest traffic) modeling locations at discrete receptor locations around each analysis location (primarily residences near the interchanges). The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones.</p> <p>Mobile source air toxics can also have adverse health impacts, but the U.S. Environmental Protection Agency has not established National Ambient Air Quality Standards for these pollutants. As a result, the Federal Highway Administration analyzes these pollutants using emissions analyses. The mobile source air toxics emissions analysis for the Study Area found little difference in total annual emissions of mobile source air toxics emissions between the Preferred and No-Action Alternatives (less than a 1 percent difference) in 2025 and 2035. With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions.</p> <p>Many studies have investigated the prevalence of adverse health effects in the near-road environment. Given concerns about the possibility of air pollution exposure in the near-road environment, the Health Effects Institute has dedicated a number of research efforts toward investigating this issue. In November 2007, the Health Effects Institute published Special Report #16: Mobile-Source Air Toxics: A Critical Review of the Literature on Exposure and Health Effects. This report concluded that the cancer health effects attributable to mobile sources are difficult to discern because the majority of quantitative assessments are derived from occupational</p>

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	<p>Almost everyday. I would sit on the top and pray. It gave me a good feeling within myself each day I did this. I would also see how close the house had started to come out. This was only the beginning. Now today I see how much the of the city has come. Then it makes me realize how many of these white people that are making their house come out our way, could and are prejudice to Indians. To hear of this mountain being destroyed has put a great hurt in my spiritual life. Because God has made this creation and people are wanting to mess it up for something that is not really necessary. The freeway today has been serving a good enough purpose. Also if this freeway being built it would take away my grandchildren's right to have a home out there, as well as my daughter. She has a part in this section about the freeway being built. Through all this she has not been notified of every mtg that was held. She only heard it from her aunts after the meeting had taken place. So for her to help, she needs to be notified of all mtgs. I don't know who these people who are even wanting</p>

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89 (cont.)		<p>cohorts with high concentration exposures and because some cancer potency estimates are derived from animal models. In January 2010, the Health Effects Institute released Special Report #17, investigating the health effects of traffic-related air pollution. The goal of the research was to synthesize available information on the effects of traffic on health. Researchers looked at linkages between: 1) traffic emissions (at the tailpipe) with ambient air pollution in general, 2) concentrations of ambient pollutants with human exposure to pollutants from traffic, 3) exposure to pollutants from traffic with human-health effects and toxicological data, and 4) toxicological data with epidemiological associations.</p> <p>Overall, researchers felt that there was “sufficient” evidence for causality for the exacerbation of asthma. Evidence was “suggestive but not sufficient” for health outcomes such as cardiovascular mortality and others. Study authors also noted that past epidemiological studies may not provide an appropriate assessment of future health associations because vehicle emissions are decreasing over time. Finally, in 2011 three studies were published by the Health Effects Institute evaluating the potential for mobile source air toxics “hot spots.” In general, the authors confirmed that while highways are a source of air toxics, they were unable to find that highways were the only source of these pollutants. They determined that near-road exposures were often no different or no higher than background (or ambient) levels of exposure and, hence, no true hot spots were identified. These reports are available from the Health Effects Institute’s Web site at <healtheffects.org>. The Federal Highway Administration and U.S. Environmental Protection Agency provide financial support to the Health Effects Institute’s research work.</p> <p>Another source of information is the U.S. Environmental Protection Agency’s recently released report on Children’s Health and the Environment:</p> <p><i>The level of knowledge regarding the relationship between environmental exposures and health outcomes varies widely among the topics [presented in this report], and the inclusion of an indicator in the report does not necessarily imply a known relationship between environmental exposure and children’s health effects. The report provides data for selected children’s health conditions that warrant further research because the causes, including possible contributing environmental factors, are complex and not well understood at this point.</i></p> <p><i>In the case of asthma, researchers do not fully understand why children develop the condition. However, substantial evidence shows exposure to certain air pollutants, including particulate matter and ozone, can trigger symptoms in children who already have asthma. Although the report found the percentage of children reported to currently have asthma increased from 8.7 percent in 2001 to 9.4 percent in 2010 and that minority populations are particularly affected by asthma, the severity of children’s asthma and respiratory symptoms has declined. The rate of emergency room visits for asthma decreased from 114 visits per 10,000 children in 1996 to 103 visits per 10,000 children in 2008. Between 1996 and 2008, hospitalizations for asthma and for all other respiratory causes decreased from 90 hospitalizations per 10,000 children to 56 hospitalizations per 10,000 children.</i></p> <p><i>The report also looks at trends in other health conditions, such as Attention-Deficit/Hyperactivity Disorder (ADHD) and preterm births, for which rates have increased. There is no conclusive information on the role of environmental contaminants in ADHD or preterm births, and additional research is ongoing.</i></p>

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	<p>to build this Freeway. I don't know why they can't hold a meeting in each District to see what the people think. Even though it is for landowners. But I think it is going to affect the whole reservation, especially with the living conditions. For the ones who are in the homes. Will they continue to stay or will they have to move. I know in life that change is good. But in this matter I don't think so. I know of some elders who still go to get the medicine, and cactus food and soap for their health and spiritual needs. As we grow older. How can our tradition stay alive if we don't stand up for our community. I can see that there are more homes being built out there today. And if these people have to move then why are we wasting money when it could start going to a medical or other emergency need. Because by this Freeway being built. We are all going to need a lot of medical needs. Especially of the speed limit and if the car goes over the railing. Has anyone thought of all the accidents and mistakes there could be. I don't know how many people climb that mountain. But you need to climb it and take a good look</p>

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89 (cont.)		Finally, the Federal Highway Administration notes that while the incidence of some health effects (such as asthma, autism, and attention deficit/hyperactivity disorder) in the U.S. population appear to have been increasing, motor vehicle emissions have declined. This decline in mobile source air toxics emissions is documented in Figure 4-24 of the Final Environmental Impact Statement and for other pollutants at <epa.gov/ttn/chief/trends/>. This negative correlation between emissions trends and health effects trends illustrates the complexity of the issues.
	Cultural Resources	The importance of the South Mountains Traditional Cultural Property is acknowledged on pages 4-130 and 4-141 of the Draft and Final Environmental Impact Statements, respectively. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. This consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Historic Preservation Act eligibility recommendations, project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.
	Tribal Involvement	Arizona Department of Transportation advertisement efforts of the public hearing and public forums are documented in Chapter 6 of the Final Environmental Impact Statement beginning on page 6-23. The Gila River Indian Community Communication and Public Affairs Office informed the Arizona Department of Transportation that all communication and distribution of informational materials on Gila River Indian Community land would be handled by the Communication and Public Affairs Office. Advertisement text regarding the project, the public comment period, the public hearing and the various ways for the public to submit comments regarding the South Mountain Freeway Draft Environmental Impact Statement was given to the Gila River Indian Community's Public Information Officer at the Transportation Technical Team meeting on April 30, 2013. Two advertisements regarding the public hearing, information regarding the location and availability of the Draft Environmental Impact Statement, and a map of the alternatives was placed in the May 2013 monthly issue of the <i>Gila River Indian News</i> . The Arizona Department of Transportation Community Relations distributed electronic notices (e-newsletters) through the Government Delivery system to over 12,000 constituents who voluntarily signed up for project alerts along the Interstate 10 Papago, Maricopa, and Santan Freeways. These electronic notices included notice of availability of Draft Environmental Impact Statement (distributed on April 26, 2013); public hearing (distributed on May 10, 2013); the community forums (distributed on May 29, 2013) and one in June (close of the Draft Environmental Impact Statement public comment period). In addition, anyone who had attended a previous meeting on the proposed action and signed in received all of this information mailed individually. On May 6, 2013, 73,564 mailers were distributed to addresses within the Study Area.

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	<p>at the pollution. Believe me it is not a very good feeling. To see all of the grey. Gee! we don't even want to stand in a dust storm. That even carries all kinds of chemicals as well. I thought it was just dirt. Until my daughter caught the Valley Fever. And asked around. Then I realized that we all have it. Because we live in the desert. Its just how are bodies work and our immune system. So to wonder if the pollution that will come along with the Freeway. and To say to someone that I helped put my family in danger. Is kinda foolish. Because I might as well have killed them myself. I wish there is another way to build a road not a Freeway. Because there is always another solution. Because in life we have a wrong and a right. So please take into consideration of everyone involved from infants to adults. As well as all the health reasons of the people have of today. The mountain does have a reason for it being where it is at today. So to bother it would bring more harm to us all. Disgusted for. Because it is the work of our hand. And it brings survival. I also wonder if they build this Freeway. Are</p>

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89 (cont.)		<p>The public hearing for the proposed action was widely advertised. Newspaper advertisements in six newspapers of area-wide distribution ran at least twice each. Announcements occurred on five radio stations and six television stations. Mailers were sent on May 6, 2013, to 73,564 individuals (approximately 311 on the Gila River Indian Community) who had previously expressed an interest in the project. E-newsletters were distributed on three different occasions. All materials were also provided to the Gila River Indian Community Public Information Officer. Offers to the Gila River Indian Community Manager to host a public outreach events on the Gila River Indian Community began in summer 2012. The Gila River Indian Community first officially responded to this offer at the April 30, 2013, meeting of the Transportation Technical Team. During this meeting, the Gila River Indian Community Manager requested that a community forum be conducted on the Gila River Indian Community following the public hearing. This was the only request the Arizona Department of Transportation received from the Gila River Indian Community regarding whether the Arizona Department of Transportation could hold a public outreach event during the public comment period. The Arizona Department of Transportation agreed to do so, and a community forum was held on June 22, 2013, at the Komatke Boys & Girls Club on the Gila River Indian Community.</p> <p>As noted in Chapter 2 of the Final Environmental Impact Statement, efforts to involve the Gila River Indian Community, a sovereign nation, in the environmental impact statement process are extensive. Public involvement with the Gila River Indian Community was conducted as requested by the tribal government. Prior to October 2005, early efforts to involve the Gila River Indian Community included attending tribal meetings and monthly meetings with Gila River Indian Community Departments (see discussion beginning on page 2-8 of the Draft and Final Environmental Impact Statements). On October 14, 2005, the Gila River Indian Community requested that all project-related communications take place at a government-to-government level (see letter on page A152 of Appendix 1-1). This request was honored by the Arizona Department of Transportation and Federal Highway Administration. All public involvement efforts were implemented by the Gila River Indian Community's public involvement officer.</p>
	Water Resources	<p>Table 4-41 on page 4-106 of the Final Environmental Impact Statement discloses the number of wells that may be acquired by each action alternative and, as noted on page 4-108 of the Final Environmental Impact Statement, some of these wells are abandoned wells. Impacts to wells on the Gila River Indian Community are not anticipated.</p>
	Acquisitions and Relocations	<p>No homes on Gila River Indian Community land would be acquired for the proposed freeway.</p>

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	<p>my people who live out there going to have to start paying for their water from the city. I know there are several water wells out there. But will they have to be covered because of this Freeway. The water out in that area is not so well. But in order to have better water. The wells would have to be dug deeper. So to take things away or destroy is not a good way of life. The mountain has given me much in my life. It has kept me strong, sane, peaceful, and healthy. As well as other purposes. So to see it being destroyed is sad. Because I'm sure if we want our kids to stay active and exercise. We need to all need to take a stand. So one needs to be really honest about all aspects of this Freeway. Especially to the community of the reservation.</p> <p>Wendell Henry 520-562-1530</p>

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	<div>Linda Allen</div> <div>Document Created: 7/20/2013 12:55:15 AM by Web Comment Form</div>
1	<p>Arizona Department of Transportation officials who are part of 202 planning were to have taken cultural awareness trainings put on by the Gila River Indian Community, as stated by Community Manager David White. When were those trainings conducted, what GRIC department conducted them, and what were the policy shifts, if any, that resulted from the cultural awareness trainings? What scoping comments from these trainings went into the DEIS?</p>
2	<p>Was the Section 106 process for South Mountain ever begun between the Tribal Historic Preservation Office and the Arizona Department of Transportation? If no, when can GRIC expect that process to start, in order to comply with the Religious Freedom and Restoration Act, as well as the National Historic Preservation Act? What outreach and scoping has ADOT done to the sister tribes of O'odham who also hold the South Mountain range as sacred, namely the Salt River Pima-Maricopa Indian Community, the Ak-Chin Indian Community, and the Tohono O'odham Nation? What outreach and scoping has ADOT done to the other tribes who have cultural affiliation to South Mountain, such as the Colorado River Indian Tribes and the Hopi Nation?</p>
3	<p>If the freeway were to be built, what type of assurances are there that air quality assessments for Gila River and Maricopa County will be kept separate? Gila River has been awarded a Clean Air Excellence award by the Environmental Protection Agency, and our community does not want any of our air quality measurements to fall under the Phoenix region, which has had sanctions from the EPA for withdrawing their clean air programs.</p>
4	<p>On January 19, 2011, the Environmental Protection Agency Regional Administrator signed the Gila River Indian Community's (GRIC) Tribal Implementation Program (TIP) into effect. The effect of this action was to make the TIP federally enforceable. The TIP regulates air quality within the boundaries of Gila River, and its purpose is to enforce air quality standards within the GRIC boundaries. The TIP contains ordinances that require GRICDEQ staff, tribal attorneys, and if needed, the GRIC tribal police, to assume civil and criminal enforcement actions against persons who violate clean air standards outlined in the TIP. If the E1 alignment is built, and air quality monitors in Gila River exceed PM10 and ozone standards, what will be the procedure for Gila River to prosecute federal agencies or persons whose actions violate clean air standards within the TIP?</p>
5	<p>On January 25, 2011 the State of Arizona withdrew plans for a State Implementation Plan (SIP) to meet particulate matter-10 standards in the Maricopa County PM-10 nonattainment area, thus failing to comply with provisions of the Clean Air Act. By withdrawing the SIP, the State of Arizona triggered a January 31, 2011 decision by the Environmental Protection Agency to begin a sanctions clock on Maricopa County, because the county's air quality plan does not adequately protect human health. What air quality permits will the Arizona Department of Transportation have to secure in order to begin construction on the E1 alignment in Maricopa County, especially in light of being under the sanctions clock by the</p>

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1	Cultural Resources	<p>Cultural sensitivity training sessions were held on May 24, 2010, June 14, 2010, December 28, 2010, and January 20, 2011. The training sessions were led by the Gila River Indian Community's Tribal Historic Preservation Officer and by staff from the Gila River Indian Community's Cultural Resource Management Program. The purpose of the training was to raise awareness and sensitivity to cultural and natural resources that would be encountered by personnel as they conducted field investigations on Community land for the proposed Gila River Indian Community Alignment. The training was recommended by the Gila River Indian Community's Cultural Resources Standing Committee at the time they issued the right of entry to the South Mountain project team. The training did not result in policy shifts or scoping comments for the study. As noted on page 2-8 of the Draft and Final Environmental Impact Statement, the coordinated referendum occurred in February 2012, and Community members voted in favor of the no-build option. Therefore, the Gila River Indian Community Alignment was eliminated from further study.</p>
2	Cultural Resources	<p>Section 106 of the National Historic Preservation Act requires a government-to-government relationship between the Federal Government and Indian tribes as described beginning on page 4-140 of the Final Environmental Impact Statement. Section 106 requires that federal agencies take into account the effects of their undertakings on historic properties. This process requires consultation with tribal authorities. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. The consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Register of Historic Places eligibility recommendations (including traditional cultural properties), project effects, and proposed mitigation and measures to minimize harm. In 2003, the Federal Highway Administration and Arizona Department of Transportation initiated National Historic Preservation Act Section 106 consultations with all Native American tribes that claimed cultural affiliation to the Study Area. Consultations were initiated with the Ak-Chin Indian Community, Gila River Indian Community, the Hopi Tribe, the Salt River Pima-Maricopa Indian Community, the Tohono O'odham Nation, the Yavapai-Apache Tribe, and the Yavapai-Prescott Indian Tribe. As noted in Table 4-47 that begins on page 4-145 of the Final Environmental Impact Statement, the Gila River Indian Community was consulted in 2003 with subsequent contact in 2005, 2006, 2007, 2008, 2010, 2011, 2012, and 2013. This supports an early and continued consultation with the Gila River Indian Community related to resources of importance.</p> <p>In 2005, the Federal Highway Administration and Arizona Department of Transportation consulted with all Native American tribes in Arizona to ensure all interested Native Americans were included in the process and had the opportunity to communicate their concerns. These tribes were the Ak-Chin Indian Community, the Chemehuevi Tribe, the Cocopah Tribe, the Colorado River Indian Tribe, the Fort McDowell Yavapai Nation, the Fort Mojave Tribe, the Fort Yuma-Quechan Tribe, the Gila River Indian Community, the Havasupai Tribe, the Hopi Tribe, the Hualapai Tribe, the Kaibab-Paiute Tribe, the Navajo Nation, the Pascua Yaqui Tribe, the Pueblo of Zuni, the Salt River Pima-Maricopa Indian Community, the</p>

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6	<p>Because of South Mountain's religious and cultural significance to the Gila River Indian Community, the Salt River Pima-Maricopa Indian Community, and the Colorado River Indian Tribes, building the E1 alignment will have an adverse impact on the exercise of Native American religious beliefs. If MAG, ADOT, and the State of Arizona continue with plans to build the proposed E1 alignment, these agencies and the state will be violating parts of the Religious Freedom and Restoration Act (RFRA), specifically as defined in 42 U.S.C. Amendment 2000cc-5. The proposed E1 alignment would introduce visual, atmospheric, and audible elements that would diminish South Mountain's cultural and religious significance. Many O'odham feel that South Mountain is in eminent danger from construction plans that will impact their sacred site for all time. There has been a lack of good faith consultation with O'odham traditional religious leaders, and almost a complete lack of diligence in the Section 106 process with GRIC. When will ADOT begin to consult closely with O'odham religious leaders, and to also inform them that the proposed 202 extension is also part of the Maricopa Association of Governments' plan to build the Sun Corridor between Phoenix and Tucson?</p>
7	<p>What type of government-to-government talks will ADOT disclose that they have done with Gila River tribal leadership to uphold the United Nations Declaration of the Rights of Indigenous People (UNDRIP), namely Article 7 of Convention No. 169 which states that Indigenous and tribal peoples have the right to "decide their own priorities for the process of development as it affects their lives, beliefs, institutions and spiritual well-being and the lands they occupy or otherwise use, and to exercise control over their economic, social and cultural development."? Maricopa County is within the territorial boundaries of the U.S. and is subject to the laws, both international and domestic of the United States of America, and since the U.S. is a supporter of the UNDRIP, Maricopa County officials also are obligated to the UNDRIP's articles and recommendations. Finally they U.S. Ratified the ILO Convention 169 (which is legally binding) and signed onto the ILO, which means they are legally obligated to its principles and conventions.</p>
8	<p>The cornerstone of Convention No. 169, on which all its provisions are based, is consultation and participation of Indigenous and tribal peoples. The Convention requires that Indigenous and tribal peoples are consulted on issues that affect them. It requires that these peoples are able to engage in free, prior and informed participation in policy and development processes that affect them. This means not just the Gila River Indian Community, but also Salt River Pima-Maricopa Indian Community, Ak-Chin Indian Community, Tohono O'odham Nation, Colorado River Indian Tribes and Hopi Nation, which are all tribes that have cultural affiliations to South Mountain. To ensure that the rights of these Indigenous and tribal peoples are protected and taken into account when any measures are being undertaken that are likely to have an impact on these peoples, scoping must be done by ADOT in those communities.</p>

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2 (cont.)		<p>San Carlos Apache Tribe, the San Juan Southern Paiute, the Tohono O'odham Nation, the Tonto Apache Tribe, the White Mountain Apache Tribe, the Yavapai-Apache Tribe, and the Yavapai-Prescott Indian Tribe. Most of these tribes did not express an interest in the proposed project.</p> <p>The Ak-Chin Indian Community, the Salt River Pima-Maricopa Indian Community, and the Tohono O'odham deferred to the Gila River Indian Community to take the lead with Section 106 consultations on this proposed action project.</p> <p>Consultation with Native America tribes has been extensive and demonstrates a reasonable and good faith effort to include all interested Native American tribes in the process to take their concerns seriously in the planning effort. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.</p>
3	Air Quality	<p>The Clean Air Excellence Award was awarded to the Gila River Indian Community Department of Environmental Quality Air Quality Program Team based on the development of a multi-program Air Quality Management Plan to regulate air quality, the first of its kind for an Indian Community. The award was not in any way an indication of the quality of the air within Gila River Indian Community land. The Gila River Indian Community is not included in the Maricopa County Carbon Monoxide Maintenance Area or the Maricopa 8-hour Ozone Nonattainment Area. The northern part of the Gila River Indian Community is within the Maricopa County Particulate Matter Nonattainment Area (see Figure 4-20 on page 4-71 of the Final Environmental Impact Statement). The Gila River Indian Community is part of the Maricopa Association of Governments and as such is included in air quality conformity demonstrations for the Maricopa Association of Governments region.</p> <p>The air quality assessment for the proposed freeway analyzed impacts from carbon monoxide and particulate matter (PM₁₀) and followed U.S. Environmental Protection Agency guidelines. No violations of either the carbon monoxide or particulate matter (PM₁₀) standards were identified, even at worst-case locations along the project corridor. Thus, the carbon monoxide and particulate analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones. For mobile source air toxics, the analysis showed that for the Study Area, constructing the freeway would have a marginal effect on annual emissions in 2025 and 2035 (less than a 1 percent difference in total annual emissions between the Preferred Alternative and No-Action Alternative). With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions. The air quality analyses were updated for the Final Environmental Impact Statement, including a quantitative particulate matter (PM₁₀) analysis, and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement.</p> <p>Congestion relief resulting from the proposed freeway would provide localized air quality emissions reductions on area freeways and arterial streets and at interchanges, benefiting users of area highways and those living near congested roads.</p>

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9	<p>The proposed freeway is meant to be an I-10 commercial truck bypass to decrease traffic congestion on I-10 in Maricopa County. In the DEIS, the impacts of air pollution do not include vehicle emissions from commercial trucks originating from Mexico, which are fueled with diesel that does not meet the environmental standards adopted by Arizona. The air pollution models in the DEIS need to study the number of Mexican commercial trucks with destinations that pass through metro Phoenix, or whose destinations are in this geographic region. Those tons of air pollution need to be identified (what type of particulate matter it would be and the associated health impacts), quantified, and factored in to the analysis of air quality.</p>
10	<p>If living near a major highway adversely affects air quality, does it shorten the human lifespan, and if so, how much shorter is the human lifespan? ADOT or HDR has a legal and civil responsibility to bring in outside research and air toxicology experts to explain how poor air quality affects the body, as well as pregnancy outcomes and fertility rates. The 2005 JATAP study must be included in the FEIS, as well.</p>
11	<p>Aerial photography must be added to the DEIS to show how many homes in Gila River would be destroyed by the path of the proposed project, as well as the acreage of Indigenous TCPs that would be destroyed.</p>
12	<p>South Mountain is a sacred area not just to the Gila River Indian Community, but to the Ak-Chin Indian Community, Salt River Pima-Maricopa Indian Community, the Tohono O'odham Nation, the Hopi, and to the Colorado River Indian Tribes. What type of scoping, community outreach, and hearings did ADOT perform in those communities?</p>
13	<p>What consultants from those communities were brought in to stress the protection of traditional cultural properties?</p>
14	<p>What types of protections are in place for NRHP-eligible resources in the South Mountain Park Preserves (SMPP)? Under Criterion A (association with an important event) and Criterion B (association with an important person) of Section 106 of the NRHP, the entire 16,600 acres of the SMPP is NRHP-eligible as a traditional cultural property. This means the No Build alternative is the only action ADOT can take to protect the South Mountains.</p>
15	<p>The DEIS describes a fence to be built around an O'odham cultural resource , as a mitigation measure. Culture cannot be fenced, and the freeway's direct and indirect impacts to this site must be brought back to the Gila River Indian Community, Ak-Chin Indian Community, Salt River Pima-Maricopa Indian Community, Tohono O'odham Nation, Hopi tribe, and the Colorado River Indian Tribes (CRIT) before this resource is further impaired. Article 8 of the 2007 United Nations Declaration of the Rights of Indigenous Peoples (UNDRIP) prohibits the "forced assimilation or destruction of Indigenous culture." Further analysis of direct and indirect impacts to Site AZ T:12:112 is a basic human and civil right for the affected tribal stakeholders.</p>

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4	Air Quality	<p>The Gila River Indian Community’s primary purpose for developing the Tribal Implementation Plan and the Air Quality Management Plan is to provide a regulatory structure for industrial sources that were not permitted by the Gila River Indian Community nor U.S. Environmental Protection Agency. The Gila River Indian Community’s regulatory authority is limited to enforcement of these permitted facilities.</p>
5	Air Quality	<p>In May 2012, the Arizona Department of Environmental Quality submitted a revised Maricopa Association of Governments 2012 Five Percent Plan for the region. On July 20, 2012, the U.S. Environmental Protection Agency made an official finding that the Maricopa Association of Governments 2012 Five Percent Plan was administratively complete. This decision ended the sanctions clocks associated with Arizona’s decision to withdraw the Maricopa Association of Governments 2007 Five Percent Plan. On February 6, 2014, the U.S. Environmental Protection Agency published a notice in the <i>Federal Register</i> proposing to approve the Maricopa Association of Governments <i>2012 Five Percent Plan for Attainment of the PM-10 Standard</i> for the Maricopa County Nonattainment Area. In the same notice, the U.S. Environmental Protection Agency stated that it would concur with exceptional event (as a result of haboobs and dust storms) documentation prepared by the Arizona Department of Environmental Quality, which would give the region the 3 years of clean data needed for attainment of the particulate matter (PM₁₀) 24-hour standard. Finally on May 30, 2014, the U.S. Environmental Protection Agency approved the 2012 Five Percent Plan and found the area in attainment of the 24-hour particulate matter (PM₁₀) standard based on monitoring data for the years 2010 to 2012 (see page 4-72 of the Final Environmental Impact Statement for more information).</p> <p>The air quality assessment for the proposed freeway analyzed impacts from carbon monoxide and particulate matter (PM₁₀) and followed U.S. Environmental Protection Agency guidelines. No violations of either the carbon monoxide or particulate matter (PM₁₀) standards were identified, even at worst-case locations along the project corridor. Thus, the carbon monoxide and particulate analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones.</p> <p>The Arizona Department of Transportation will need to obtain dust control permits from Maricopa County Air Quality Department. These requirements are typical for this type of project.</p>

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16	<p>If the E1 alignment were built, there are eight O'odham TCPs that would be indirectly affected, including petroglyphs, artifact scatter, and prehistoric trails. The E1 alignment completely destroys another TCP element, as it is in the path of the proposed freeway. The City of Phoenix is currently undertaking an NRHP-eligibility determination study of the archaeological sites within SMPP. Civil rights and human rights within the UNDRIP mandate that an evaluation of the traditional cultural properties be performed with direct consultation of traditional O'odham leaders BEFORE any route of the proposed project can be selected. Article 7 of the UNDRIP states that Indigenous and tribal peoples have the right to “decide their own priorities for the process of development as it affects their lives, beliefs, institutions and spiritual well-being and the lands they occupy or otherwise use, and to exercise control over their economic, social and cultural development”.</p>
7	<p>The City of Phoenix, under the provisions of the Phoenix Mountain Preserve Act, is not able to sell South Mountain Park Preserves land to ADOT. ADOT would have to condemn 31.3 acres of SMPP land before it could be used for the proposed freeway extension. Under the 1964 Civil Rights Act, Native Americans are a protected class, and intrusions on Native American religious practices are illegal. How does ADOT plan to condemn 31 acres of an O'odham cultural resource without consulting with traditional leaders of O'odham tribes, as well as Hopi and CRIT? Article 25, Section 3 of the UNDRIP says that “states shall give legal recognition and protection to these lands, territories and resources. Such recognition shall be conducted with due respect to the customs, traditions and land tenure systems of the Indigenous peoples concerned.”</p>
17	<p>No action can be taken on the proposed freeway extension until the Tribal Historic Preservation Office responds to an August 17, 2011 document regarding NRHP eligibility of the South Mountains. Request that ADOT withdraw consideration of the South Mountain extension of the Loop 202 Freeway until all tribal stakeholders are directly consulted by the Tribal Historic Preservation Office about NRHP eligibility.</p>
18	<p>Because of the egregious lack of information in the DEIS, a revised DEIS must first be written by ADOT/HDR Engineering that adequately informs the public so that members of the public can make an informed decision about the proposed project.</p>

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6	Cultural Resources	<p>Since the beginning of the environmental impact statement process, the Federal Highway Administration and Arizona Department of Transportation have been carrying out cultural resources studies and engaging in ongoing, open consultation with the Gila River Indian Community Tribal Historic Preservation Office regarding the identification and evaluation of places of religious and cultural importance to the tribe that may be adversely affected by the proposed freeway. Such places are referred to as traditional cultural properties. As a result of these discussions and of studies conducted by the Gila River Indian Community’s Cultural Resource Management Program, the Gila River Indian Community has identified traditional cultural properties that are eligible for listing in the National Register of Historic Places and that could be affected by construction of the proposed freeway. In certain cases, listing these properties on the National Register of Historic Places may offer them protection under Section 4(f) of the Department of Transportation Act. The traditional cultural properties identified are culturally important to other Native American tribes as well. For more discussion of traditional cultural properties, see the section, <i>Cultural Resources</i>, beginning on page 4-140 of the Final Environmental Impact Statement and pages 5-26 through 5-28.</p> <p>Section 106 of the National Historic Preservation Act requires a government-to-government relationship between the Federal Government and Indian tribes as described beginning on page 4-140 of the Final Environmental Impact Statement. Section 106 requires that federal agencies take into account the effects of their undertakings on historic properties. This process requires consultation with tribal authorities. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. The consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Register of Historic Places eligibility recommendations (including traditional cultural properties), project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.</p> <p>The Draft Environmental Impact Statement, after consultation and coordination efforts, accommodates and preserves (to the fullest extent possible from the available alternatives) access to the South Mountains for religious practices. A very small portion of the mountain would be impacted by the proposed freeway (less than 0.03 percent of the total area). Although the Draft Environmental Impact Statement describes the impact on the South Mountains as adverse, Native Americans would not be kept from practicing their beliefs, access to the mountain would be maintained, and mitigation measures would be implemented based on input from members of the Gila River Indian Community.</p>

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6 (cont.)		As detailed in Chapter 1, <i>Purpose and Need</i> , in the Draft and Final Environmental Impact Statements, the proposed action is needed to address local capacity deficiencies, not to address the Sun Corridor between Tucson and Phoenix, and has been developed in response to local growth in population, housing, employment, and travel levels. As further discussed, on page 1-5 of the Draft and Final Environmental Impact Statements, the proposed action is based on logical termini, sufficient length, independent utility, projected travel needs, and construction priorities. The proposed action is not needed in response to national freight movement, nor is it intended to provide service primarily for freight movement.

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7	Cultural Resources	<p>The United States has confirmed that the United Nations Declaration on the Rights of Indigenous Peoples is “not legally binding or a statement of current international law” and is limited to “moral and political force.” <i>Announcement of U.S. Support for the United Nations Declaration on the Rights of Indigenous Peoples</i>, U.S. State Department (Dec. 17, 2010) (available at: state.gov/documents/organization/154782.pdf). The government’s Announcement further clarified that the United States “understands [that the Declaration] calls for a process of meaningful consultation with tribal leaders, but not necessarily the agreement of those leaders, before the actions addressed in those consultations are taken.” In this case, as described in the Draft and Final Environmental Impact Statements, through consultation, the Tribal Historic Preservation Office of the Gila River Indian Community concurred with the mitigation measures recommended for implementation in connection with the E1 Alternative. To the extent there is disagreement by individual tribal members, their comments have been considered and taken into account. However, the Declaration does not create an enforceable legal standard amending the National Environmental Policy Act process.</p> <p>As described in the Draft and Final Environmental Impact Statements, the consultation process with Native American tribes, and in particular with the Gila River Indian Community, was lengthy, repeated, and extensive. Traditional cultural properties were evaluated with input from affected tribes and are described in the Draft and Final Environmental Impact Statements. Although the consent of tribal leaders is not required, as the United States made clear in its Announcement quoted above, the Tribal Historic Preservation Officer agrees with the mitigation measures to be imposed in connection with the E1 Alternative affecting a small portion of South Mountain.</p> <p>The quoted language in the comment attributed to Article 7 of the Declaration does not appear there. The language appears to derive from the International Labor Organization’s 1989 Indigenous and Tribal Peoples Convention (Convention No. 169). Convention 169 has never been ratified by the United States, which has not agreed to align legislation, policies, and programs with the Convention as a legal requirement.</p>
8	Cultural Resources	<p>Section 106 requires that federal agencies take into account the effects of their undertakings on historic properties. This process requires consultation with tribal authorities. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. The consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Register of Historic Places eligibility recommendations (including traditional cultural properties), project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.</p> <p>In 2003, the Federal Highway Administration and Arizona Department of Transportation initiated National Historic Preservation Act Section 106 consultations with all Native American tribes that claimed cultural affiliation to the Study Area. Consultations were initiated with the Ak-Chin Indian Community, Gila River Indian Community, the Hopi Tribe, the Salt River Pima-Maricopa Indian Community, the Tohono O’odham Nation, the Yavapai-Apache Tribe, and the Yavapai-Prescott Indian Tribe.</p>

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8 (cont.)		<p>As noted in Table 4-47 that begins on page 4-145 of the Final Environmental Impact Statement, the Gila River Indian Community was consulted in 2003 with subsequent contact in 2005, 2006, 2007, 2008, 2010, 2011, 2012, and 2013. This supports an early and continued consultation with the Gila River Indian Community related to resources of importance.</p> <p>In 2005, the Federal Highway Administration and Arizona Department of Transportation consulted with all Native American tribes in Arizona to ensure all interested Native American were included in the process and had the opportunity to communicate their concerns. These tribes were the Ak-Chin Indian Community, the Chemehuevi Tribe, the Cocopah Tribe, the Colorado River Indian Tribe, the Fort McDowell Yavapai Nation, the Fort Mojave Tribe, the Fort Yuma-Quechan Tribe, the Gila River Indian Community, the Havasupai Tribe, the Hopi Tribe, the Hualapai Tribe, the Kaibab-Paiute Tribe, the Navajo Nation, the Pascua Yaqui Tribe, the Pueblo of Zuni, the Salt River Pima-Maricopa Indian Community, the San Carlos Apache Tribe, the San Juan Southern Paiute, the Tohono O’odham Nation, the Tonto Apache Tribe, the White Mountain Apache Tribe, the Yavapai-Apache Tribe, and the Yavapai-Prescott Indian Tribe. Most of these tribes did not express an interest in the proposed project.</p> <p>The Ak-Chin Indian Community, the Salt River Pima-Maricopa Indian Community, and the Tohono O’odham deferred to the Gila River Indian Community to take the lead with Section 106 consultations on this proposed action project.</p> <p>Consultation with Native America tribes has been extensive and demonstrates a reasonable and good faith effort to include all interested Native American tribes in the process to take their concerns seriously in the planning effort.</p>
9	Trucks	<p>Creating a truck bypass is not a goal of the proposed action. The proposed freeway is part of a transportation system developed to improve mobility in the region by increasing capacity and allowing traffic—including truck traffic—to access a segment of the “loop” system (see pages 1-21, 1-22, 3-1, and 3-3 of the Final Environmental Impact Statement) in the Phoenix metropolitan area. The proposed South Mountain Freeway would be a commuter corridor, helping to move local traffic. As with all other freeways in the region, trucks would use it for the through-transport of freight, for transport to and from distribution centers, and for transport to support local commerce. Nevertheless, the primary vehicles using the proposed freeway would be automobiles. The Maricopa Association of Governments regional travel demand model projects that truck traffic would represent approximately 10 percent of the total traffic on the proposed freeway, similar to what is currently experienced on other regional freeways such as Interstate 10, State Route 101L, and U.S. Route 60. As disclosed in the Final Environmental Impact Statement, it is expected that “true” through-truck traffic (not having to stop in the metropolitan area) would continue to use the faster, designated, and posted bypass system of Interstate 8 and State Route 85 (see page 3-64 of the Final Environmental Impact Statement).</p>

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9 (cont.)		<p>Trucks crossing from Mexico to Arizona are restricted to the commercial zones within 25 miles of the border. The Federal Motor Carrier Safety Administration is administering a United States-Mexico cross-border, long-haul trucking pilot program. The program tests and demonstrates the ability of Mexico-based motor carriers to operate safely in the United States beyond the municipalities and commercial zones along the United States-Mexico border (see <fmcsa.dot.gov/intl-programs/trucking/trucking-program.aspx>).</p> <p>Petróleos Mexicanos (better known as Pemex), the Mexican state-owned petroleum company that serves all of Mexico, provides 15 parts per million in its sulfur diesel fuel in the border region, which is consistent with the U.S. Environmental Protection Agency requirements for American diesel fuel (see <http://transportpolicy.net/index.php?title=Mexico:_Fuels:_Diesel_and_Gasoline>).</p> <p>Arizona highways, as are most highways across the United States, are open to all kinds of traffic, so long as the cargo being carried is in accordance with U.S. Department of Transportation regulations for the specific type of cargo. The South Mountain Freeway would operate under the same rules as other similar facilities in the state; truck traffic would be permissible (see text box on Final Environmental Impact Statement page 4-157).</p> <p>The CANAMEX and Phoenix truck bypass (Interstate 8/State Route 85) routes are not mandatory for truck traffic; they are recommended. The Arizona Department of Transportation does not enforce these routes. It is not anticipated that these routes would be enforced as mandatory in the future.</p> <p>The air quality analyses included projected truck traffic. The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones. For mobile source air toxics, the analysis showed that for the Study Area, constructing the freeway would have a marginal effect on annual emissions in 2025 and 2035 (less than a 1 percent difference in total annual emissions between the Preferred Alternative and No-Action Alternative). With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions. Because Mexican trucks are currently restricted to the border region, they are not operating in the project Study Area and they were not included in the air quality analyses.</p>

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10	Air Quality	<p>Under the Clean Air Act, the U.S. Environmental Protection Agency is responsible for establishing National Ambient Air Quality Standards to protect public health and the environment from adverse effects of air pollutants. Health effects from air pollutants are based on the concentration of the pollutants and the duration of exposure. Concentrations vary with distance from a roadway based on many factors, including background (or ambient) levels of pollution from all sources; the number, speed, and type of vehicles on the roadway; wind speed and direction; topography; and other factors. For the proposed freeway, the Federal Highway Administration conducted modeling for carbon monoxide and particulate matter (PM₁₀) using worst-case (most congested or highest traffic) modeling locations at discrete receptor locations around each analysis location (primarily residences near the interchanges). The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones.</p> <p>Mobile source air toxics can also have adverse health impacts, but the U.S. Environmental Protection Agency has not established National Ambient Air Quality Standards for these pollutants. As a result, the Federal Highway Administration analyzes these pollutants using emissions analyses. The mobile source air toxics emissions analysis for the Study Area found little difference in total annual emissions of mobile source air toxics emissions between the Preferred and No-Action Alternatives (less than a 1 percent difference) in 2025 and 2035. With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions.</p> <p>Many studies have investigated the prevalence of adverse health effects in the near-road environment. Given concerns about the possibility of air pollution exposure in the near-road environment, the Health Effects Institute has dedicated a number of research efforts toward investigating this issue. In November 2007, the Health Effects Institute published Special Report #16: Mobile-Source Air Toxics: A Critical Review of the Literature on Exposure and Health Effects. This report concluded that the cancer health effects attributable to mobile sources are difficult to discern because the majority of quantitative assessments are derived from occupational cohorts with high concentration exposures and because some cancer potency estimates are derived from animal models. In January 2010, the Health Effects Institute released Special Report #17, investigating the health effects of traffic-related air pollution. The goal of the research was to synthesize available information on the effects of traffic on health. Researchers looked at linkages between: 1) traffic emissions (at the tailpipe) with ambient air pollution in general, 2) concentrations of ambient pollutants with human exposure to pollutants from traffic, 3) exposure to pollutants from traffic with human-health effects and toxicological data, and 4) toxicological data with epidemiological associations. Overall, researchers felt that there was “sufficient” evidence for causality for the exacerbation of asthma. Evidence was “suggestive but not sufficient” for health outcomes such as cardiovascular mortality and others. Study authors also noted that past epidemiological studies may not provide an appropriate assessment</p>

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10 (cont.)		<p>of future health associations because vehicle emissions are decreasing over time. Finally, in 2011 three studies were published by the Health Effects Institute evaluating the potential for mobile source air toxics “hot spots.” In general, the authors confirmed that while highways are a source of air toxics, they were unable to find that highways were the only source of these pollutants. They determined that near-road exposures were often no different or no higher than background (or ambient) levels of exposure and, hence, no true hot spots were identified. These reports are available from the Health Effects Institute’s Web site at <healtheffects.org>. The</p> <p>Federal Highway Administration and U.S. Environmental Protection Agency provide financial support to the Health Effects Institute’s research work.</p> <p>Another source of information is the U.S. Environmental Protection Agency’s recently released report on Children’s Health and the Environment:</p> <p><i>The level of knowledge regarding the relationship between environmental exposures and health outcomes varies widely among the topics [presented in this report], and the inclusion of an indicator in the report does not necessarily imply a known relationship between environmental exposure and children’s health effects. The report provides data for selected children’s health conditions that warrant further research because the causes, including possible contributing environmental factors, are complex and not well understood at this point.</i></p> <p><i>In the case of asthma, researchers do not fully understand why children develop the condition. However, substantial evidence shows exposure to certain air pollutants, including particulate matter and ozone, can trigger symptoms in children who already have asthma. Although the report found the percentage of children reported to currently have asthma increased from 8.7 percent in 2001 to 9.4 percent in 2010 and that minority populations are particularly affected by asthma, the severity of children’s asthma and respiratory symptoms has declined. The rate of emergency room visits for asthma decreased from 114 visits per 10,000 children in 1996 to 103 visits per 10,000 children in 2008. Between 1996 and 2008, hospitalizations for asthma and for all other respiratory causes decreased from 90 hospitalizations per 10,000 children to 56 hospitalizations per 10,000 children.</i></p> <p><i>The report also looks at trends in other health conditions, such as Attention-Deficit/Hyperactivity Disorder (ADHD) and preterm births, for which rates have increased. There is no conclusive information on the role of environmental contaminants in ADHD or preterm births, and additional research is ongoing.</i></p> <p>Finally, the Federal Highway Administration notes that while the incidence of some health effects (such as asthma, autism, and attention deficit/hyperactivity disorder) in the U.S. population appear to have been increasing, motor vehicle emissions have declined. This decline in mobile source air toxics emissions is documented in Figure 4-24 of the Final Environmental Impact Statement and for other pollutants at <epa.gov/ttn/chief/trends/>. This negative correlation between emissions trends and health effects trends illustrates the complexity of the issues.</p> <p>Summary information about the findings of the Joint Air Toxics Assessment Project study is provided as background information in the Draft and Final Environmental Impact Statements, but the study itself is not relevant to the type of analysis done pursuant to the Federal Highway Administration’s mobile source air toxics guidance, which is an emissions analysis. Monitored ambient concentrations of mobile source air toxics (the focus of the Joint Air Toxics Assessment Project) do not inform this type of analysis. While monitoring data can be useful for defining current conditions in the affected environment (to the extent that the monitoring</p>

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10 (cont.)		data are current),they don't tell us anything about future conditions, or the impacts of the project itself, which is why an emissions analysis was performed. The mobile source air toxic analysis presented beginning on page 4-77 of the Final Environmental Impact Statement is an estimated inventory of mobile source air toxic emissions for the entire Study Area for 2025 and 2035. This approach was used because the inventory estimate accounts for changes in traffic and emissions on all roadways affected by a proposed project, and would, therefore, be a more reliable predictor of changes in exposure to mobile source air toxics.
11	Right-of-way	<p>Maps of the W59 and E1 (Preferred) Alternatives were provided at the public hearing and community forums and are available for viewing and downloading through the project Web site (see azdot.gov/southmountainfreeway).</p> <p>None of the action alternatives would be located on Gila River Indian Community land so there would be 0 homes destroyed by the path of the proposed project. The impacts on traditional cultural properties are described in the <i>Cultural Resources</i> section beginning on pages 4-131 and 4-142 of the Draft and Final Environmental Impact Statements, respectively, and in Chapter 5, <i>Section 4(f) Evaluation</i>, beginning on page 5-26 of the Draft and Final Environmental Impact Statements.</p> <p>The locations of sites of cultural importance are not shown in public documents to protect the sites from potential pilfering.</p>
12	Cultural Resources	<p>Since the beginning of the environmental impact statement process, the Federal Highway Administration and Arizona Department of Transportation have been carrying out cultural resources studies and engaging in ongoing, open consultation with the Gila River Indian Community Tribal Historic Preservation Office regarding the identification and evaluation of places of religious and cultural importance to the tribe that may be adversely affected by the proposed freeway. Such places are referred to as traditional cultural properties. As a result of these discussions and of studies conducted by the Gila River Indian Community's Cultural Resource Management Program, the Gila River Indian Community has identified traditional cultural properties that are eligible for listing in the National Register of Historic Places and that could be affected by construction of the proposed freeway. In certain cases, listing these properties on the National Register of Historic Places may offer them protection under Section 4(f) of the Department of Transportation Act. The traditional cultural properties identified are culturally important to other Native American tribes as well. For more discussion of traditional cultural properties, see the section, <i>Cultural Resources</i>, beginning on page 4-140 of the Final Environmental Impact Statement and pages 5-26 through 5-28.</p> <p>Section 106 of the National Historic Preservation Act requires a government-to-government relationship between the Federal Government and Indian tribes as described beginning on page 4-140 of the Final Environmental Impact Statement. Section 106 requires that federal agencies take into account the effects of their undertakings on historic properties. This process requires consultation with tribal authorities. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. The consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Register of Historic Places eligibility recommendations (including traditional cultural properties), project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.</p>

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12 (cont.)		<p>Agency scoping comments from the project initiation in 2001 are presented beginning on page 6-3 of the Draft and Final Environmental Impact Statements. The Gila River Indian Community was part of the agency scoping process. Public involvement with the Gila River Indian Community was conducted as requested by the tribal government. Prior to October 2005, early efforts to involve the Gila River Indian Community included attending tribal meetings and monthly meetings with Gila River Indian Community Departments (see discussion beginning on page 2-8 of the Draft and Final Environmental Impact Statements). On October 14, 2005, the Gila River Indian Community requested that all project-related communications take place at a government-to-government level (see letter on page A152 of Appendix 1-1). This request was honored by the Arizona Department of Transportation and Federal Highway Administration. All public involvement efforts were implemented by the Gila River Indian Community’s public involvement officer. In addition to Chapter 2 of the Final Environmental Impact Statement which explains the Gila River Indian Community outreach undertaken for the project, Chapter 6 of the Final Environmental Impact Statement further describes Gila River Indian Community and general outreach throughout the process. The Gila River Indian Community was provided equal opportunities to participate in the project as all other populations and agencies. This outreach was undertaken, in part, to ensure all populations had equal access to the process and, in part, to ensure disparate nor disproportionately high adverse impacts would result from the construction and operation of the proposed action.</p>
13	Cultural Resources	<p>The Gila River Indian Community has been involved in many aspects of this proposed project. The Gila River Indian Community’s Cultural Resource Management Program was contracted to provide cultural resources surveys, to determine the eligibility of cultural resources sites (including traditional cultural properties) for listing in the National Register of Historic Places, and to assist in the development of measures to minimize harm to traditional cultural properties. The Gila River Indian Community’s Tribal Historic Preservation Office has also been involved in determining the eligibility of cultural resources sites (including traditional cultural properties) for listing in the National Register of Historic Places, and in assisting in the development of measures to minimize harm to traditional cultural properties.</p> <p>After determining that no prudent and feasible alternatives existed to avoid the South Mountains Traditional Cultural Property, efforts were undertaken to minimize harm. These measures are documented, beginning on page 5-27 of the Draft and Final Environmental Impact Statements. Some of these measures included avoidance of specific sites and providing multiuse crossings and fencing that would limit access by freeway users, but allow Gila River Indian Community members to continue to gain access to the site.</p> <p>In addition, the Federal Highway Administration and Arizona Department of Transportation committed to provide funds for the Gila River Indian Community to conduct a full evaluation of the South Mountains Traditional Cultural Property (see page 4-159 of the Final Environmental Impact Statement). Documentation of these efforts are in a letter from the Lieutenant Governor of the Gila River Indian Community to the Administrator, Arizona Division, Federal Highway Administration, dated June 23, 2010 (see page A372 of Appendix 2-1 of the Final Environmental Impact Statement). In this letter, the Gila River Indian Community submitted a proposal for the “Evaluation of Traditional Cultural Property and</p>

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13 (cont.)		<p>Adverse Effects of Transportation Corridor Development posed by the proposed construction of the current Pecos Alignment of the South Mountain Freeway.”</p> <p>In committing to the evaluation of the South Mountains Traditional Cultural Property, the Federal Highway Administration and Arizona Department of Transportation also committed to the Gila River Indian Community’s participation in ongoing engineering design refinements and acknowledged the significance of all plants and animals in the traditional culture of the Akimel O’odham and Pee Posh of the Gila River Indian Community.</p> <p>The Arizona Department of Transportation and Federal Highway Administration solicited input from the Gila River Indian Community and other Native American tribes and tribal members and considered fully the substantive input and comments that were received. While efforts to study project alternatives on Gila River Indian Community land that did not directly impact South Mountain were attempted, as noted on page 2-8 of the Draft and Final Environmental Impact Statements, a coordinated referendum occurred in February 2012, and Gila River Indian Community members voted in favor of the no-build option. Therefore, the on-Gila River Indian Community alignment was eliminated from further study. Any alternative on Gila River Indian Community land must consider tribal sovereignty. Tribal sovereignty is based in the inherent authority of Native American tribes to govern themselves. While this notion of sovereignty is manifested in many areas, generally Native American land is held in trust by the United States. Native American communities have the authority to regulate land uses and activities on their lands. States have very limited authority over activities within tribal land (see page 2-1 of the Final Environmental Impact Statement). From a practical standpoint, this means that the Arizona Department of Transportation and Federal Highway Administration do not have the authority to survey tribal land, make land use (including transportation) determinations directly affecting tribal land, or condemn tribal land for public benefit through an eminent domain process.</p> <p>However, mitigation measures developed through consultation and coordination with the Tribal Historic Preservation Office and other concerned parties would be considered for implementation in any final action.</p>
14	Cultural Resources	<p>The eligibility recommendations to the National Register of Historic Places for cultural resources within the Study Area begin on page 4-141 of the Final Environmental Impact Statement. According to page 5-26 of the Final Environmental Impact Statement, the South Mountains Traditional Cultural Property boundary is currently undefined; however, as noted on page 5-27, the Arizona Department of Transportation and Federal Highway Administration would provide funds for the Gila River Indian Community to conduct an evaluation of the South Mountains Traditional Cultural Properties to determine those boundaries as a measure to minimize harm to the South Mountains Traditional Cultural Properties.</p> <p>Section 106 of the National Historic Preservation Act requires a government-to-government relationship between the Federal Government and Indian tribes as described beginning on page 4-140 of the Final Environmental Impact Statement. Section 106 requires that federal agencies take into account the effects of their undertakings on historic properties. This process requires consultation with tribal authorities. Thus disclosure of effects and consultation are the outcomes of the Act. Protection of these resources is provided by Section 4(f) of the Department of Transportation Act of 1966 (as amended). The Final Environmental Impact Statement, beginning on page 5-1, describes the protections provided by Section 4(f). Section 4(f) states that the use of resources afforded protection under Section 4(f)</p>

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14 (cont.)		<p>requires a determination that there is no prudent and feasible alternative to using that land; and that the project includes all possible planning to minimize harm to the resource resulting from the use. The outcome of this process was the determination that there was no prudent and feasible alternative to the E1 Alternative.</p> <p>This conclusion was supported by the U.S. Department of the Interior in their comment on the Draft Environmental Impact Statement: comment: “Following our review of the Section 4(f) Evaluation, we concur that there is no feasible or prudent alternative to the Preferred Alternative selected in the document, and that all measures have been taken to minimize harm to these resources. “ The complete letter can be found in Appendix 7, Volume III, on page B4 of the Final Environmental Impact Statement.</p> <p>Measures to minimize harm to the South Mountains Traditional Cultural Property (and traditional cultural properties that contribute to the South Mountains Traditional Cultural Property) were developed in consultation with the Gila River Indian Community (and other tribes with interest). During the design phase, the Arizona Department of Transportation would consult directly with the Gila River Indian Community to identify and implement other design measures, when feasible, to further reduce land requirements needed for the proposed action. (See Final Environmental Impact Statement page 5-27 for the discussion on measures to minimize harm.)</p>
15	Cultural Resources	<p>The complete statement on page 5-26 of the Draft Environmental Impact Statement, states, “A right-of-way fence would limit access to the site by freeway users, but Community members would continue to gain access to the site as they currently do.”</p> <p>As described in the Draft and Final Environmental Impact Statements, the Tribal Historic Preservation Office of the Gila River Indian Community concurred with the mitigation measures recommended for implementation in connection with the E1 Alternative. To the extent there is disagreement by individual tribal members, their comments have been considered and taken into account. However, the United Nations Declaration on the Rights of Indigenous Peoples Declaration does not create an enforceable legal standard amending the National Environmental Policy Act process.</p>
16	Cultural Resources	<p>The comment that eight traditional cultural properties would be indirectly affected is incorrect. Adverse effects to the South Mountains Traditional Cultural Property and one site that is contributing to the South Mountains Traditional Cultural Property (AZ T:12:197) would occur with the construction of the E1 Alternative.</p> <p>No extant petroglyph sites would be adversely affected. The trail sites were determined eligible for listing in the National Register of Historic Places listing under Criterion D as archaeological sites; therefore, as noted on page 5-2 of the Final Environmental Impact Statement, generally, cultural resources eligible for listing in the National Register of Historic Places under Criterion D are not eligible for protection under Section 4(f). Through consultation and coordination, the Gila River Indian Community Tribal Historic Preservation Office, the Arizona State Historic Preservation Office, and many other tribal authorities concurred with these recommendations (see Table 4-47 on page 4-145 of the Final Environmental Impact Statement for more details on tribal concurrences).</p> <p>To the extent there is disagreement by individual tribal members, their comments have been considered and taken into account. However, the United Nations Declaration on the Rights of Indigenous Peoples Declaration does not create an enforceable legal standard amending the National Environmental Policy Act process.</p>

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17	Cultural Resources	<p>As documented in Table 4-47 on page 4-145 of the Final Environmental Impact Statement, the Gila River Indian Community concurred with the National Register of Historic Places eligibility of traditional cultural places and the adequacy of the draft traditional cultural places mitigation plans on July 3, 2012.</p> <p>Section 106 of the National Historic Preservation Act requires a government-to-government relationship between the Federal Government and Indian tribes as described beginning on page 4-140 of the Final Environmental Impact Statement. Section 106 requires that federal agencies take into account the effects of their undertakings on historic properties. This process requires consultation with tribal authorities. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. The consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Register of Historic Places eligibility recommendations (including traditional cultural properties), project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed. As noted in Table 4-47 that begins on page 4-145 of the Final Environmental Impact Statement, the Gila River Indian Community was initially consulted in 2003 with subsequent contact in 2005, 2006, 2007, 2008, 2010, 2011, 2012, and 2013. This supports an early and continued consultation with the Gila River Indian Community related to resources of importance.</p>
18	Cultural Resources	<p>The Arizona Department of Transportation and Federal Highway Administration, in cooperation with the U.S. Army Corps of Engineers, the U.S. Bureau of Indian Affairs, and the Western Area Power Administration, prepared the Draft Environmental Impact Statement and Section 4(f) Evaluation in accordance with the National Environmental Policy Act of 1969 [42 United States Code § 4332(2) (c)], Section 4(f) of the U.S. Department of Transportation Act of 1966 (49 United States Code § 303, as amended), and Section 404 of the Clean Water Act of 1977 (33 United States Code § 1251). The Draft Environmental Impact Statement and Section 4(f) Evaluation 1) satisfies Federal Highway Administration and Arizona Department of Transportation’s environmental analysis requirements; 2) provides a comparison of the social, economic, and environmental impacts that may result from implementation of the proposed action—construction and operation of a major transportation facility; and 3) identifies measures to avoid, reduce, or otherwise mitigate adverse impacts.</p>

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1 over, Ana Morago, if you're here we'll take you at
2 that time.

3 (Recessed from 12:00 p.m. until
4 12:28 p.m.)

5 THE FACILITATOR: Thank you.

6 Ana Morago.

7 If you'd like to speak and have not yet
8 registered, please go out to the front desk
9 registration.

10 Thank you. Amy Bratt.

11 MS. BRATT: Good afternoon. My name is
12 Amy Bratt, and I'm with the Greater Phoenix Chamber
13 of Commerce. The Chamber support of this freeway
14 goes back over 25 years to the first time the voters
15 approved the transportation funds to build it. For
16 us, this is a no-brainer. The project is an
17 opportunity to bolster this low economic recovery
18 efforts that have occurred to date in our region.
19 The 30,000 jobs created during the five- to six-year
20 construction period, and the \$2 billion investment in
21 land, professional services, materials, and equipment
22 will be a significant boost to our economy. Putting
23 people to work and moving goods and services are the
24 key elements of commerce.

25 To the end -- or to that end, on behalf

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1		Comment noted.

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	<div><div></div><div><div>1 of our 2,600 members, the greater Phoenix Chamber of</div><div>2 Commerce agrees it is time to build the South</div><div>3 Mountain Freeway. We support investments in</div><div>4 transportation projects that will improve mobility</div><div>5 and contribute to economic development, environmental</div><div>6 quality and jobs. We need the jobs, and we want the</div><div>7 investment.</div><div>8 It's time to relieve the congestion in</div><div>9 the southern portion of our metropolitan region, and</div><div>10 allow for free movement of people and commerce. As</div><div>11 we supported it 25 years ago, we support it again</div><div>12 today. Thank you so much for the opportunity to</div><div>13 provide comment.</div><div>14 THE FACILITATOR: Thank you. Kate</div><div>15 Gallego.</div><div>16 MS. GALLEGO: Hello, I'm Kate Gallego,</div><div>17 South Mountain resident. Former chair of the</div><div>18 Environmental Quality Commission in Phoenix, and I'm</div><div>19 here in support of the freeway. I think it will</div><div>20 relieve congestion and stop some of the cut-through</div><div>21 traffic. It will bring important economic</div><div>22 development to Laveen and job creation, creating over</div><div>23 30,000 jobs.</div><div>24 It's an important part of our</div><div>25 transportation network. It needs to be part of a</div></div></div> <div><div>Page 56</div><div>Driver and Nix Court Reporters - (602) 266-6525 www.drivernix.com</div></div>

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	<div>4228</div> <div><div>1respectfully to each other.</div><div>2THE FACILITATOR: Thank you.</div><div>3Joseph Perez. Joseph Perez.</div><div>4MR. PEREZ: I'm Joseph Perez. Thank you</div><div>5for allowing me the opportunity to make a comment to</div><div>6you about your Draft Environmental Impact Statement.</div><div>7I am a Gila River Indian Community member. I'm also</div><div>8a partner with Pangia [phonetic] and I lead a little</div><div>9bit over 1,200 landowners who exist in the Pecos Road</div><div>10Land Area that have put forward the initiative with</div><div>11the Gila River Indian Community for a revote to try</div><div>12to bring the alignment down on the reservation, which</div><div>13hopefully will be resolved tomorrow in a special</div><div>14council meeting.</div><div>15I'm here today to comment on the draft</div><div>16EIS in the sense that the work that has been done</div><div>17pertaining to the Gila River Indian Community, and</div><div>18the cultural aspects was done through the community's</div><div>19cultural department. And they've worked closely and</div><div>20for a long time, I believe over 12 years, doing that</div><div>21aspect of the EIS. Unfortunately, where it stands</div><div>22right now, there is no other alternative for the</div><div>23freeway, because the only other alternative would be</div><div>24on the Gila River Indian Community. I believe that</div><div>25will have to be resolved with the people of the</div></div> <div>Page 39</div> <div>Driver and Nix Court Reporters - (602) 266-6525 www.drivernix.com</div>

Code	Issue	Response
1	Alternatives	In accordance with 40 Code of Federal Regulations § 1502.14, the Arizona Department of Transportation and Federal Highway Administration explored and evaluated all reasonable alternatives. Page 2-10 of the Final Environmental Impact Statement discusses the path forward should alternatives on Gila River Indian Community land become available for study. Any alternative on Gila River Indian Community land must consider tribal sovereignty. Tribal sovereignty is based in the inherent authority of Native American tribes to govern themselves. While this notion of sovereignty is manifested in many areas, generally Native American land is held in trust by the United States. Native American communities have the authority to regulate land uses and activities on their lands. States have very limited authority over activities within tribal land (see page 2-1 of the Final Environmental Impact Statement). From a practical standpoint, this means that the Arizona Department of Transportation and Federal Highway Administration do not have the authority to survey tribal land, make land use (including transportation) determinations directly affecting tribal land, or condemn tribal land for public benefit through an eminent domain process.

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	<div><div>1 community or in tribal council.</div><div>2 My main focus today is that the impact</div><div>3 that the freeway would have is across the board. I</div><div>4 believe your statement covers that. I believe your</div><div>5 study covers that. What I would like to comment</div><div>6 about is that we believe there will be other</div><div>7 opportunities -- another opportunity for another</div><div>8 alignment. We hope that that is taken into</div><div>9 consideration when that opportunity comes.</div><div>10 In terms of my culture, that is across</div><div>11 the board. You're talking about Native Americans,</div><div>12 Pimas, O'odhams, Pee Posh, Maricopas that live within</div><div>13 the community. They all call themselves community</div><div>14 members. We've all been raised differently. We all</div><div>15 see the world through the way that our grandparents</div><div>16 should have raised us. I'm considered an O'odham. I</div><div>17 consider what we have doesn't end at our border. The</div><div>18 no-build that many people will talk about, hemda</div><div>19 [phonetic], and say that that is what they're trying</div><div>20 to protect. What I want you to understand in terms</div><div>21 of the cultural aspects of your Draft Environmental</div><div>22 Impact Statement is that hemda [phonetic] doesn't</div><div>23 stop at the border; it doesn't stop at the border of</div><div>24 the Gila River Indian Community; it doesn't stop with</div><div>25 us community members, it transcends everything that</div></div> <div>Page 40</div> <div>Driver and Nix Court Reporters - (602) 266-6525 www.drivernix.com</div>

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	<div><div>1 our world encompasses; it transcends everything that</div><div>2 we do.</div><div>3 And so with that in mind, I, as a</div><div>4 community member, apologize for the disrespect that</div><div>5 you get, for the disrespect that ADOT gets in</div><div>6 everything. We should not be that way. We should</div><div>7 practice a better way to be with you.</div><div>8 And that's what I want to thank you about</div><div>9 for today. Thank you.</div><div>10 THE FACILITATOR: Thank you. Terry</div><div>11 Morris.</div><div>12 MR. MORRIS: Hello, I'm Terry Morris.</div><div>13 I'm a fourth-generation Arizonan, and listening to</div><div>14 Mr. Perez just now changed my train of thought a</div><div>15 little bit. I had -- my main concern about this</div><div>16 project is the -- I believe the lack of attention to</div><div>17 the Indian communities in the Maricopa County, as</div><div>18 evidenced by the lack of posters in the other room.</div><div>19 There's a lot of information over there in the other</div><div>20 room, but not very much that I can see that pertain</div><div>21 to the impact on the Native American communities.</div><div>22 I'm also very concerned about the</div><div>23 threatened and endangered wildlife that can be</div><div>24 affected. I am an avid hiker, and there are not very</div><div>25 many preserve hikes left, where you're not in the</div></div> <div>Page 41</div> <div>Driver and Nix Court Reporters - (602) 266-6525 www.drivernix.com</div>

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	<p>Document Created: 7/24/2013 4:13:25 PM by Web Comment Form</p> <p>Since 2004 Pangea a development company has been 2004 organizing over 1,200 individual land owners on the Gila River Indian Community (GRIC), this land is owned by these individual Native Americans and not under the regulatory control of the GRIC government.</p> <p>Pangea is in the final stages of leasing approximately 5,500 acres of this land just south of Pecos road. This land is scheduled to be developed as a fully master planned community, which will include residential, commercial, retail, manufacturing, sports facilities, amusement park and entertainment venues.</p> <p>The Loop 202 is a catalyst for this development and the current alignment on Pecos road is acceptable for Pangea and the over 1,200 individual land owners but an alignment that is on the GRIC and on the allotted land would benefit all parties and would save South Mountain from any destruction as well as substantially reduce the overall cost of building the Loop 202 (not have to cut through South Mountain).</p> <p>Our review of the Draft Environmental Impact Statement (DEIS) has determined that the research conducted and current recommendation is satisfactory from a development perspective for Pangea and the landowners. Pangea and the landowners encourage and support ADOT and the Maricopa Association of Governments (MAG) to build the South Mountain Loop 202 freeway as quickly as possible for the many reasons identified with the DEIS.</p> <p>In addition to supporting the building of the South Mountain Loop 202, the landowners and Pangea request that ADOT and MAG investigate and further study a schedule for construction which would start at the junction of the San Tan Freeway and Interstate-10 or the east end of the E-1 Alternative alignment as opposed to the W59 Alternative or west side of Phoenix at Interstate-10.</p> <p>This schedule of construction would directly benefit the landowners, Pangea, the citizens of Ahwatukee, Maricopa County and the State of Arizona in the following ways:</p> <ol style="list-style-type: none">1. Immediate and much needed economic development to the GRIC and directly to the landowners.2. Directly reduce the over 60% unemployment rate of GRIC members.3 Directly reduce the over 65% of GRIC members that live under the poverty level of the State of Arizona by providing jobs and revenue from their land leases with Pangea.4. Provide residential opportunity for over 8,000 GRIC members that currently live within the greater Phoenix Metro area and can not obtain housing on the GRIC.5. Provide direct business development opportunity for GRIC members within the Pangea development.6. Provide immediate short-term (6 months) and long-term (20 years) construction business

1

Code	Issue	Response
1	Construction	As noted in the Draft and Final Environmental Impact Statements, construction sequencing and duration could change based on several factors, including funding availability, traffic volumes, coordination with other major freeway projects, earthwork balancing, utility relocation schedules, and regional priorities. The project team will take the request under advisement.

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	<p>and job opportunity for non-Native companies within the greater Phoenix Metro area.</p> <p>7. Provide a new business and job opportunity base that would directly support the Ahwatukee area and provide much needed positive benefits of the Loop 202 directly to Ahwatukee.</p> <p>8. Provide an new, immediate and long term tax based for the State of Arizona and Maricopa County that is estimated to provide \$21,000,000 of retail transaction and privilege tax over the next 10 years due to the Pangea development.</p> <p>9. As there are no master planned communities greater than 500 acres scheduled for the Laveen area or along W59 Alternative alignment, the Pangea development has already started and construction of the Loop 202 on the east side would immediately and directly benefit the GRIC, Maricopa County and the State.</p> <p>10. The positive public relations benefits of starting construction on the east end far outweigh any positive benefits of starting on the west end.</p> <p>Pangea and the landowners once again ask that a revision of the DEIS be conducted to study the direct impacts of construction starting on the east of the E-1 Alternative and the benefits for all parties involved.</p> <p>Pangea will continue to support the landowners in their on-going public voter Initiative on the GRIC, as the current status of the Initiative is not ended. The current actions of the GRIC Tribal Elections Office is not supported by evidence gathered by the police department, as the investigation provided evidence of only 21 signatures that could be invalidated, not the 174 the Tribal Elections Office removed from the Initiative.</p> <p>2 Pangea and the landowners also request that the DEIS be revised to include the study data for an alignment on the GRIC for the following reasons:</p> <p>1. GRIC Resolution GR-80-98, adopted on June 17, 1998 by Tribal Council resolved that the Gila River Borderlands area (Regional Planning Study for the Gila River Borderlands Planning area/ Gila River Borderlands Study) be considered the land use plan for the Gila Borderlands area.</p> <p>2. This Resolution stands to this day and has never been rescinded by any action from the GRIC Tribal Council and is not rescinded or affected by the referendum vote of February 2012 for "No Build".</p> <p>3. The Resolution approved the GRIC Loop 202 alignment identified within the study document as the land use plan for transportation for the freeway system on the GRIC.</p> <p>4. The Resolution identifies over 60 meetings were held within the seven Districts, with Elderly, Community Council Standing Committees, Corporations, Departments and other Community Entities and the Community's Planning and Zoning Commission publicized and conducted public hearings on the Gila Borderlands Study.</p> <p>5. The Resolution identifies that the Economic Development and Natural Resources Standing Committees reviewed the Gila Borderland Study and approved if for action by Tribal Council.</p> <p>6. The Resolution identifies that the Community Council also reviewed the Gila Borderlands</p>

Code	Issue	Response
2	Alternatives	<p>In accordance with 40 Code of Federal Regulations § 1502.14, the Arizona Department of Transportation and Federal Highway Administration explored and evaluated all reasonable alternatives. Page 2-10 of the Final Environmental Impact Statement discusses the path forward should alternatives on Gila River Indian Community land become available for study. Any alternative on Gila River Indian Community land must consider tribal sovereignty. Tribal sovereignty is based in the inherent authority of Native American tribes to govern themselves. While this notion of sovereignty is manifested in many areas, generally Native American land is held in trust by the United States. Native American communities have the authority to regulate land uses and activities on their lands. States have very limited authority over activities within tribal land (see page 2-1 of the Final Environmental Impact Statement). From a practical standpoint, this means that the Arizona Department of Transportation and Federal Highway Administration do not have the authority to survey tribal land, make land use (including transportation) determinations directly affecting tribal land, or condemn tribal land for public benefit through an eminent domain process.</p>

Code	Comment Document
	<p>Study and approved it as the land use plan for the Community.</p> <p>7. The referendum conducted in February 2012 and approved by voters did not eliminate the the land use plan and Loop 202 on Reservation alignment.</p> <p>It is only prudent and within the best interest of the GRIC, Community members, Pecos road landowners, the residences of Ahwatukee, Maricopa County and the State of Arizona to include this data as the information should be available for the public to view and tax dollars of the public was used to gather this data. More importantly, this data would greatly assist members of the GRIC in understanding more about the freeway and the impact it would have on the Community.</p> <p>Pangea hopes that the above request be implemented in the final draft of the EIS as this project is vital for all parties involved.</p> <p>Thank you.</p> <p>Joseph M. Perez, Partner Pagnea</p>

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	<div>4212</div> <div><div>1 want to go hike in a park where there's a huge</div><div>2 eight-lane freeway cut through the southwest region.</div><div>3 So Save Our Mountains Foundation would</div><div>4 like to encourage you, and whoever in the state needs</div><div>5 to make this happen, to negotiate better with the</div><div>6 Gila River Indian community and the Indian community</div><div>7 at large, and we hope that they will also come to the</div><div>8 table to talk, and that we can make a freeway happen</div><div>9 where it doesn't chop into the preserve and part of</div><div>10 what forms a crown and glory for the City of Phoenix.</div><div>11 We don't have oceans, we don't have beaches, but we</div><div>12 do have a beautiful preserve system.</div><div>13 Thank you very, very much.</div><div>14 THE FACILITATOR: Thank you,</div><div>15 Ms. Rothwell.</div><div>16 Michael Goodman.</div><div>17 MR. GOODMAN: Thank you. I'm Michael</div><div>18 Goodman. I'm also with the Phoenix Mountains</div><div>19 Preservation Council, and I am a member of the ADOT</div><div>20 Citizens Advisory Team. Pretty much I agree with</div><div>21 what has already been said, so I'll be pretty brief.</div><div>22 I did finish reading the EIS, and with regards to the</div><div>23 E-1 section, I was highly disappointed. I know</div><div>24 during the so-called 12 years we've been studying</div><div>25 this, we had a number of reports, I guess the E-1 was</div></div> <div><div>Page 12</div><div>Driver and Nix Court Reporters - (602) 266-6525</div><div>www.drivernix.com</div></div>

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1	<p>1 probably about, what, four or five years of that time</p> <p>2 period. And I found that with almost every report,</p> <p>3 somebody who understood what was going on had a</p> <p>4 question for the consultants to explain something or</p> <p>5 other that they seemed to have left out or just</p> <p>6 didn't want to talk about.</p> <p>7 And it was -- it got to be very</p> <p>8 frustrating, we never were quite able to get all the</p> <p>9 answers we wanted. And the saying from the</p> <p>10 consultants kept being, well, wait until the draft.</p> <p>11 Well, the draft's out and I've read it and still many</p> <p>12 of the questions that people ask simply weren't</p> <p>13 answered or we were -- or I notice that there's</p> <p>14 things that had been mentioned that there's outdated</p> <p>15 information. There was just a lack of information or</p> <p>16 it just seemed that anything that didn't support what</p> <p>17 ADOT and MAG wanted, which is to blow up South</p> <p>18 Mountain, somehow got left out of the draft.</p> <p>19 And for that reason, I am opposed to the</p> <p>20 freeway if it has to go through South Mountain</p> <p>21 Preserve.</p> <p>22 Thank you.</p> <p>23 THE FACILITATOR: Thank you, Mr. Goodman.</p> <p>24 John Mockus. Did I pronounce that right,</p> <p>25 sir?</p>
2	<p>Page 13</p> <p>Driver and Nix Court Reporters - (602) 266-6525</p> <p>www.drivernix.com</p>

Code	Issue	Response
1	Environmental Impact Statement Process	<p>The Arizona Department of Transportation and Federal Highway Administration, in cooperation with the U.S. Army Corps of Engineers, the U.S. Bureau of Indian Affairs, and the Western Area Power Administration, prepared the Draft Environmental Impact Statement and Section 4(f) Evaluation in accordance with the National Environmental Policy Act of 1969 [42 United States Code § 4332(2) (c)], Section 4(f) of the U.S. Department of Transportation Act of 1966 (49 United States Code § 303, as amended), and Section 404 of the Clean Water Act of 1977 (33 United States Code § 1251). The Draft Environmental Impact Statement and Section 4(f) Evaluation 1) satisfies Federal Highway Administration and Arizona Department of Transportation's environmental analysis requirements; 2) provides a comparison of the social, economic, and environmental impacts that may result from implementation of the proposed action—construction and operation of a major transportation facility; and 3) identifies measures to avoid, reduce, or otherwise mitigate adverse impacts.</p> <p>The comment references regular inquiry pertinent to information to be disclosed in the Draft Environmental Impact Statement and directly tied to the alternatives development and screening process of the Draft Environmental Impact Statement. In those instances, information from analyses either had yet to be fully formed and/or disclosure prior to the issuance of the Draft Environmental Impact Statement would have been pre-decisional.</p>
2	Section 4(f) and Section 6(f)	<p>The proposed freeway would pass through the park's southwestern edge. Section 4(f) of the Department of Transportation Act extends protection to significant publicly owned public parks, recreation areas, and wildlife and waterfowl refuges, as well as significant historic sites, whether they are publicly or privately owned. This protection stipulates that those facilities can be used for transportation projects only if there is no prudent and feasible alternative to using the land and the project includes all possible planning to minimize harm to the land [see Final Environmental Impact Statement, Chapter 5, <i>Section 4(f) Evaluation</i>].The project team examined alternatives to avoid the Phoenix South Mountain Park/Preserve, but did not identify any feasible and prudent alternatives to avoid the use of the park. Use of a portion of the mountains for the purposes of the proposed freeway represents two-tenths of one percent of the total mountain range (31.3 acres of the park's approximately 16,600 acres; see Final Environmental Impact Statement pages S-39 and S-31). Since 1988, and as part of this environmental impact statement process, several measures have been undertaken and will be undertaken to further reduce effects on the mountains. These measures, including narrowing the design footprint, acquiring replacement land immediately adjacent to the mountains, and the provision of highway crossings, are outlined in text beginning on page S-23 of the Final Environmental Impact Statement. Phoenix South Mountain Park/Preserve would remain the largest municipally owned park in the United States. The activities that make the park a highly valued resource (recreational activities, interaction with the Sonoran Desert) would remain. Nine-tenths of a mile of the proposed freeway would pass through the park's southwestern edge (see Final Environmental Impact Statement page S-13).</p>

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	<p>My name is Maxine Lakin, past Parks and Recreation Chairman as well as past Chairman of the Phoenix Mountains Preservation Council.</p> <p>The Phoenix Mountains Preservation Council is an organization put into place by Arizona visionaries, and for the last 40 years has continued to monitor and anticipate the impact that rapid population growth would have on our precious Mountain Preserve system.</p> <p>PMPC is steadfastly opposed to any alignment of the Loop 202 South Mountain Freeway that allows for trespass onto the Mountain Preserve or for any excavation into the South Mountain what so ever. The Mountain preserves are unique and are for people and wildlife, not for vehicle trespass. PMPC does not agree with many of the DEIS assumptions, finding them objectionable and deficient in the following areas.</p> <p><u>Unacceptable Pre-Decisional Actions:</u> ADOT has made some pre-decisional actions with the purchase of property before the Draft Environmental Impact Statement (DEIS) was released. PMPC questions the legality of this action and the entire DEIS when it appears ADOT has already made considerable financial investment to establish the alignment for the South Mountain Freeway rather than follow the prescribed process.</p> <p><u>Dismal Wildlife Connectivity:</u> The DEIS does not meet the minimal requirements for coordination and analysis of wildlife resources. The consultation with the Arizona Game and Fish Department confirmed in 2009 that the current connection to the Estrella mountains allows for passage of mule deer, javelina, bobcat and mountain lion. The mountain ridge area slated for demolition meets the definition of the</p>

Code	Issue	Response
1	Alternatives	<p>The comment suggests the environmental impact statement process was biased by a history of property acquisitions within the Study Area. More specifically, properties falling within the limits of the Preferred Alternative, as identified in the Final Environmental Impact Statement, were targeted for acquisition.</p> <p>As noted in text on page 3-54 of the Final Environmental Impact Statement, the Arizona Department of Transportation began acquiring land for the original alignment in 1988. Between 1988 and 2001, the Arizona Department of Transportation acquired approximately 293 acres. Most of this land (258 acres) is located in the Eastern Section along Pecos Road. In 2006, the Arizona Department of Transportation began protective and hardship land acquisition in the alignment right-of-way footprint for the W59 and E1 Alternatives. Between 2006 and October 2013, the Arizona Department of Transportation purchased 326 acres (303 in the Western Section and 23 in the Eastern Section).</p> <p>The process for hardship and advanced acquisitions is explained in text on page 4-50 of the Final Environmental Impact Statement.</p> <p>The comment infers that by taking such action, the objective equal consideration of the alternatives studied in detail in the Draft and Final Environmental Impact Statements is tainted. Advanced acquisitions in parallel to a National Environmental Policy Act environmental determination process is not unprecedented and is common practice. In this case, property acquisitions by the Arizona Department of Transportation for purposes of implementing the proposed action are done at risk as communicated to the agency by the Federal Highway Administration. If another action alternative were to be ultimately selected, the agency would likely have to place the acquired properties on the market for sale and purchase. The Arizona Department of Transportation attempts to balance the risk against its mission of timely delivery of transportation infrastructure to the driving public. Further, Federal Highway Administration regulations do not allow the ownership of right-of-way to be a factor in the decision regarding the selection of an alternative.</p>
2	Biology, Plants, and Wildlife	<p>The section, <i>General Impacts on Vegetation, Wildlife, and Wildlife Habitat</i>, beginning on page 4-136 of the Final Environmental Impact Statement, discloses by what means the proposed action and its alternatives would affect vegetation, wildlife, and wildlife habitat. A Biological Evaluation was submitted to the U.S. Fish and Wildlife Service, Arizona Game and Fish Department, and Gila River Indian Community Department of Environmental Quality that addressed threatened, endangered, and candidate species, including the Sonoran desert tortoise. The information used to prepare the analysis in the Draft Environmental Impact Statement (page 4-122) was based on 2011 information retrieved from the Arizona Game and Fish Department (<i>Gopherus agassizii</i>, draft unpublished abstract compiled and edited by the Heritage Data Management System, Phoenix). Current information on threats and connectivity strategies was included in the Biological Evaluation. The U.S. Fish and Wildlife Service concurred with the species determinations in the Biological Evaluation (see Appendix 1-1 of the Final Environmental Impact Statement).</p> <p>Connectivity is planned to allow wildlife movement beneath the freeway in multiuse crossings (see page 4-137 of the Final Environmental Impact Statement). The Federal Highway Administration and Arizona Department of Transportation have committed to providing mitigation by including multifunctional crossing structures designed for wildlife and for limited human use as well as culverts designed for</p>

(Response 2 continues on next page)

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	Sonoran desert tortoise habitat. There is no evidence of further efforts to ascertain wildlife connectivity or habitat needs.
3	<u>Unreasonable Taking of Mountain Preservation Lands</u> : The DEIS states in Figure 5-7 of Public Parkland that the avoidance of taking over 30 acres of the Preserve is not “prudent and feasible”. The taking of this mountainside will destroy important archeological, spiritual, cultural and recreational sites with no realistic or reasonable mitigation possible in the study. The study also failed to recognize and address new two trails on the southwest end of the Preserve.
4	
5	<u>Outdated Data Projections Used</u> : The DEIS is based on outdated data projections that are now six to eight years old. IN ALL their studies, the DEIS provides NO alternative analysis to the demolition of the southwest ridges of South Mountain.
6	
7	Over 3 million visitors come to South Mountain Park/Preserve annually, according to the City of Phoenix statistics. Destroying any part of the mountain to align a high-capacity freeway will only have a negative impact on tourism and the many unique resources the park offers.
	We urge ADOT to stop providing studies that do not accurately or thoroughly address the impact this freeway has on South Mountain. It’s time to stop the 20 million dollar and more in wasted taxpayer’s money to study the environmental impact and design for an alignment that no longer makes sense.

Code	Issue	Response
2 (cont.)		connectivity for smaller species. Wildlife-friendly design information would be considered during the design of drainage and crossing structures for the freeway (see <i>Mitigation</i> , beginning on page 4-138 of the Final Environmental Impact Statement).
3	Section 4(f) and Section 6(f)	Chapter 5 of the Draft and Final Environmental Impact Statements presents the Section 4(f) Evaluation for the South Mountains in terms of the resource’s protection as a Section 4(f) resource in terms of a regional park, historic property and traditional cultural property. The evaluation included examination of feasible and prudent avoidance alternatives which concluded no such alternatives were available to the direct use of the resource. A review from the U.S. Department of the Interior on the Draft Environmental Impact Statement concluded “Following our review of the Section 4(f) Evaluation, we concur that there is no feasible or prudent alternative to the Preferred Alternative selected in the document, and that all measures have been taken to minimize harm to these resources.” The complete letter can be found in Appendix 7, Volume III, on page B4 of the Final Environmental Impact Statement.
4	Section 4(f) and Section 6(f)	South Mountain’s newest trails are the Bursera and Pyramid Trails (see Final Environmental Impact Statement page 5-8). The E1 Alternative is approximately 1 mile south of the Pyramid Trail and even farther from the Bursera Trail; thus, it would not affect either trail. The trails have walk-in access from Chandler Boulevard and 19th Avenue, with on-street parking. This walk-in access would be north of and adjacent to the planned extension of Chandler Boulevard and, thus, would not be directly affected. The walk-in access point and the part of the Pyramid Trail at the access point are located adjacent to a residential neighborhood and the City of Phoenix’s planned Chandler Boulevard Extension. These trails are typically used for high-intensity recreational activities such as running, hiking, and biking, not noise- or viewshed-sensitive activities. All proposed action alternatives would span existing and proposed trails to avoid impacts. However, during construction (if an action alternative were selected), trails that would be spanned or would be near potential freeway construction would be closed for limited times for safety reasons. Closures would necessitate that trail users detour around construction sites to rejoin the trails farther along their length. According to Phoenix South Mountain Park/Preserve rangers, the Gila Trail—although well-defined—is not a designated trail within the park. That said, the Gila Trail would not be affected by the proposed freeway or by the Chandler Boulevard Extension. The Final Environmental Impact Statement Appendix page A665 contains information directly from the Phoenix General Plan and early coordination with the City of Phoenix Parks Department. The trails in the preserve are exceptions to this statement and were always meant as such. The trails within 1/4 mile of the proposed alternatives were treated separately, as in the case of the Maricopa County Regional Trails System. Should an alternative be selected, the Arizona Department of Transportation and Federal Highway Administration would work closely with the City of Phoenix during final design to ensure the connectivity of trails is maintained, whether they are eligible as Section 4(f) resources or not.

Code	Comment Document

Code	Issue	Response
5	Purpose and Need	<p>The analyses in the Draft Environmental Impact Statement used socioeconomic and traffic projections at the regional analysis zone and traffic analysis zone levels. At the time of publication of the Draft Environmental Impact Statement, Census 2010-based socioeconomic data at the regional analysis zone and traffic analysis zone levels had not been adopted by the Maricopa Association of Governments and were not available to the project team. Therefore, the data used in the Draft Environmental Impact Statement were the most appropriate information available.</p> <p>The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future.</p>
6	Alternatives	<p>Several action alternatives were subject to the alternatives development and screening process; not just the E1 Alternative and alternatives located on the Gila River Indian Community (Figure 3-6 on page 3-10 of the Draft Environmental Impact Statement illustrates a representation of such alternatives).</p> <p>Ultimately the other alternatives were eliminated from further study in the screening process and the Gila River Indian Community decided not to give permission to study alternatives on their land (see Final Environmental Impact Statement page 3-25). Therefore, the Arizona Department of Transportation, with concurrence from Federal Highway Administration, identified the E1 Alternative as the eastern section of the Preferred Alternative (which includes the W59 Alternative in the Western Section of the Study Area). In reaching its determination, the Arizona Department of Transportation sought to balance its responsibilities to address regional mobility needs while being fiscally responsible and sensitive to local communities.</p>
7	Section 4(f) and Section 6(f)	<p>City of Phoenix planning efforts since the mid-1980s illustrate an awareness of the potential for the proposed freeway to affect Phoenix South Mountain Park/Preserve. In 1989, the South Mountain Park Master Plan was adopted by the Phoenix City Council. The master plan shows the freeway alignment as adopted by the State Transportation Board in 1988. In 1990, the South Mountain Preserve Act was ratified by the Arizona Legislature. The Act did not apply to roadways through a designated mountain preserve if the roadway was in the State Highway System prior to August 15, 1990. The proposed freeway was in the State Highway System prior to 1990. Records prior to the Act suggest a primary reason for the exception was to allow the proposed freeway to go through Phoenix South Mountain Park/Preserve (see Final Environmental Impact Statement page 5-14). The project team examined alternatives to avoid the park, but did not identify any feasible and prudent alternatives to avoid impacts. The portion of the park that would be used for the proposed freeway would be 31.3 acres, or approximately 0.2 percent of the park’s approximately 16,600 acres (see Final Environmental Impact Statement pages S-39 and 5-31). The Arizona Department of Transportation continues to work with park stakeholders to minimize impacts and address concerns. Measures to minimize harm to the park were developed (see Final Environmental Impact Statement, starting on page 5-23).</p>

Code	Comment Document
	<div>4209</div> <div><div>1MS. LAKIN: Thank you.</div><div>2THE FACILITATOR: Begin, please.</div><div>3MS. LAKIN: Wait until I -- I'm not used</div><div>4to these, you know.</div><div>5My name is Maxine Lakin; I'm past</div><div>6president of the Parks and Recreation, also of the</div><div>7Phoenix Mountain Preservation Council. The Phoenix</div><div>8Mountain Preservation Council is an organization put</div><div>9into place by Arizona visionaries and for the last 40</div><div>10years has continued to monitor and anticipate the</div><div>11impact that the rapid population growth would have on</div><div>12our precious mountain preserve system.</div><div>13PMPC is steadfastly opposed to any</div><div>14alignment of the Loop 202 South Mountain Freeway that</div><div>15allows for trespassing onto the mountain preserve or</div><div>16for any excavation into the South Mountain</div><div>17whatsoever. The mountain preserves are unique, and</div><div>18are for people in wildlife, not for vehicle trespass.</div><div>19PMPC does not agree with many of the</div><div>20DEIS assumptions, finding them objectionable and</div><div>21deficient in the following areas: unacceptable,</div><div>22pre-decision action. ADOT has made some</div><div>23pre-decisional actions with the purchase of property</div><div>24before the Draft Environmental Impact Statement was</div><div>25released. PMPC questions the legality of this action</div></div> <div>Page 8</div> <div>Driver and Nix Court Reporters - (602) 266-6525 www.drivernix.com</div>

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Code	Issue	Response
1	Alternatives	<p>The comment suggests the environmental impact statement process was biased by a history of property acquisitions within the Study Area. More specifically, properties falling within the limits of the Preferred Alternative, as identified in the Final Environmental Impact Statement, were targeted for acquisition.</p> <p>As noted in text on page 3-54 of the Final Environmental Impact Statement, the Arizona Department of Transportation began acquiring land for the original alignment in 1988. Between 1988 and 2001, the Arizona Department of Transportation acquired approximately 293 acres. Most of this land (258 acres) is located in the Eastern Section along Pecos Road. In 2006, the Arizona Department of Transportation began protective and hardship land acquisition in the alignment right-of-way footprint for the W59 and E1 Alternatives. Between 2006 and October 2013, the Arizona Department of Transportation purchased 326 acres (303 in the Western Section and 23 in the Eastern Section).</p> <p>The process for hardship and advanced acquisitions is explained in text on page 4-50 of the Final Environmental Impact Statement.</p> <p>The comment infers that by taking such action, the objective equal consideration of the alternatives studied in detail in the Draft and Final Environmental Impact Statements is tainted. Advanced acquisitions in parallel to a National Environmental Policy Act environmental determination process is not unprecedented and is common practice. In this case, property acquisitions by the Arizona Department of Transportation for purposes of implementing the proposed action are done at risk as communicated to the agency by the Federal Highway Administration. If another action alternative were to be ultimately selected, the agency would likely have to place the acquired properties on the market for sale and purchase. The Arizona Department of Transportation attempts to balance the risk against its mission of timely delivery of transportation infrastructure to the driving public. Further, Federal Highway Administration regulations do not allow the ownership of right-of-way to be a factor in the decision regarding the selection of an alternative.</p>

Code	Comment Document
2	<p>1 and the entire DEIS, when it appears ADOT has already</p> <p>2 made considerable financial investment to establish</p> <p>3 the alignment for the South Mountain Freeway, rather</p> <p>4 than follow prescribed process.</p> <p>5 The DEIS does not meet the animal</p> <p>6 requirements for coordination and analysis of</p> <p>7 wildlife resources. The consultation with the</p> <p>8 Arizona Game & Fish Department confirmed in 2009 that</p> <p>9 the current connection to the Estrella Mountains</p> <p>10 allows for passage of the mule deer, javelina,</p> <p>11 bobcat, and mountain lion. The mountain ridge area</p> <p>12 slated for demolition meets the definition -- sorry,</p> <p>13 Sonoran Desert Tortoise habitat. There is no</p> <p>14 evidence of further effort to determine wildlife</p> <p>15 connectivity on habitat needs.</p> <p>16 Unreasonable taking of mountain</p> <p>17 preservation lands. The DEIS states in Figures 5 and</p> <p>18 7 of public park land that the avoidance of taking</p> <p>19 over 30 acres of the preserve is not prudent and</p> <p>20 feasible. The taking of this mountainside will</p> <p>21 destroy important archaeology, spiritual, cultural,</p> <p>22 and recreational sites, with no realistic or</p> <p>23 reasonable mitigation possible in the study. The</p> <p>24 study also fails to recognize and address two trails</p> <p>25 on the southwest end of the preserve.</p> <p>Page 9</p> <p>Driver and Nix Court Reporters - (602) 266-6525 www.drivernix.com</p>

Code	Issue	Response
2	Biology, Plants, and Wildlife	<p>The section, <i>General Impacts on Vegetation, Wildlife, and Wildlife Habitat</i>, beginning on page 4-136 of the Final Environmental Impact Statement, discloses by what means the proposed action and its alternatives would affect vegetation, wildlife, and wildlife habitat. A Biological Evaluation was submitted to the U.S. Fish and Wildlife Service, Arizona Game and Fish Department, and Gila River Indian Community Department of Environmental Quality that addressed threatened, endangered, and candidate species, including the Sonoran desert tortoise. The information used to prepare the analysis in the Draft Environmental Impact Statement (page 4-122) was based on 2011 information retrieved from the Arizona Game and Fish Department (Gopherus agassizii, draft unpublished abstract compiled and edited by the Heritage Data Management System, Phoenix). Current information on threats and connectivity strategies was included in the Biological Evaluation. The U.S. Fish and Wildlife Service concurred with the species determinations in the Biological Evaluation (see Appendix 1-1 of the Final Environmental Impact Statement).</p> <p>Connectivity is planned to allow wildlife movement beneath the freeway in multiuse crossings (see page 4-137 of the Final Environmental Impact Statement). The Federal Highway Administration and Arizona Department of Transportation have committed to providing mitigation by including multifunctional crossing structures designed for wildlife and for limited human use as well as culverts designed for connectivity for smaller species. Wildlife-friendly design information would be considered during the design of drainage and crossing structures for the freeway (see <i>Mitigation</i>, beginning on page 4-138 of the Final Environmental Impact Statement).</p>
3	Section 4(f) and Section 6(f)	<p>The religious and cultural importance of the South Mountains is acknowledged in the Draft Environmental Impact Statement in several locations, notably pages 4-132 and 5-26 as well as in the Summary of the Draft Environmental Impact Statement. The description in the Draft and Final Environmental Impact Statements is based on input received from the Gila River Indian Community and its members and other Indian Nations and their members.</p> <p>The Final Environmental Impact Statement includes discussion on efforts to avoid use of Phoenix South Mountain Park/Preserve, starting on page 5-16. Measures to minimize harm to the park as a result of the proposed freeway start on page 5-23.</p> <p>The portion of the park that would be used for the proposed freeway would be 31.3 acres, or approximately 0.2 percent of the park's approximately 16,600 acres (see Final Environmental Impact Statement pages S-39 and 5-31). The activities that make the park such a highly valued resource (recreational activities, interaction with the Sonoran Desert) would remain.</p>
4	Section 4(f) and Section 6(f)	<p>South Mountain's newest trails are the Bursera and Pyramid Trails (see Final Environmental Impact Statement page 5-8). The E1 Alternative is approximately 1 mile south of the Pyramid Trail and even farther from the Bursera Trail; thus, it would not affect either trail. The trails have walk-in access from Chandler Boulevard and 19th Avenue, with on-street parking. This walk-in access would be north of and adjacent to the planned extension of Chandler Boulevard and, thus, would not be directly affected. The walk-in access point and the part of the Pyramid Trail at the access point are located adjacent to a residential neighborhood and the City of Phoenix's planned Chandler Boulevard Extension. These trails are typically used for high-intensity recreational activities such as running, hiking, and biking, not noise- or viewshed-sensitive activities. All proposed action alternatives would span</p>

(Response 4 continues on next page)

Code	Comment Document
5	<p>1 Outdated data projections used, based on</p> <p>2 outdated date projections that are now six to eight</p> <p>3 years old. In all the studies, the DEIS provides no</p> <p>4 alternative analysis to the demolition of the</p> <p>5 southwest ridge. Over 3 million visitors come to</p> <p>6 South Mountain Park Preserve annually.</p> <p>7 THE FACILITATOR: Excuse me, Ms. Lakin.</p> <p>8 MS. LAKIN: Destroying any part of the</p> <p>9 mountain to allaying a high-capacity freeway will</p> <p>10 only have a negative impact on tourism, and the many</p> <p>11 unique resources. We are not against this freeway,</p> <p>12 we are against going through South Mountain Preserve.</p> <p>13 Thank you.</p> <p>14 THE FACILITATOR: Thank you, Ms. Lakin.</p> <p>15 We'll now proceed with the</p> <p>16 non-pre-registered folks.</p> <p>17 One more comment before we continue. For</p> <p>18 those of you who see your name on the screen, if</p> <p>19 you're in the back parts of the room, if you want to</p> <p>20 make your way up to get people to either microphone,</p> <p>21 that will help us through the day. Feel free to move</p> <p>22 up. At this point Suzanne Rothwell.</p> <p>23 Thank you.</p> <p>24 MS. ROTHWELL: Good morning. Thank you</p> <p>25 for the opportunity to speak. Is this working? No.</p>
6	

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Code	Issue	Response
4 (cont.)		existing and proposed trails to avoid impacts. However, during construction (if an action alternative were selected), trails that would be spanned or would be near potential freeway construction would be closed for limited times for safety reasons. Closures would necessitate that trail users detour around construction sites to rejoin the trails farther along their length. According to Phoenix South Mountain Park/ Preserve rangers, the Gila Trail—although well-defined—is not a designated trail within the park. That said, the Gila Trail would not be affected by the proposed freeway or by the Chandler Boulevard Extension. The Final Environmental Impact Statement Appendix page A665 contains information directly from the Phoenix General Plan and early coordination with the City of Phoenix Parks Department. The trails in the preserve are exceptions to this statement and were always meant as such. The trails within 1/4 mile of the proposed alternatives were treated separately, as in the case of the Maricopa County Regional Trails System. Should an alternative be selected, the Arizona Department of Transportation and Federal Highway Administration would work closely with the City of Phoenix during final design to ensure the connectivity of trails is maintained, whether they are eligible as Section 4(f) resources or not.
5	Purpose and Need	The analyses in the Draft Environmental Impact Statement used socioeconomic and traffic projections at the regional analysis zone and traffic analysis zone levels. At the time of publication of the Draft Environmental Impact Statement, Census 2010-based socioeconomic data at the regional analysis zone and traffic analysis zone levels had not been adopted by the Maricopa Association of Governments and were not available to the project team. Therefore, the data used in the Draft Environmental Impact Statement were the most appropriate information available. The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future.
6	Alternatives	Several action alternatives were subject to the alternatives development and screening process; not just the E1 Alternative and alternatives located on the Gila River Indian Community (Figure 3-6 on page 3-10 of the Final Environmental Impact Statement illustrates a representation of such alternatives). Ultimately the other alternatives were eliminated from further study in the screening process and the Gila River Indian Community decided not to give permission to study alternatives on its land (see Final Environmental Impact Statement page 3-25). Therefore, the Arizona Department of Transportation, with concurrence from Federal Highway Administration, identified the E1 Alternative as the eastern section of the Preferred Alternative (which includes the W59 Alternative in the Western Section of the Study Area). In reaching its determination, the Arizona Department of Transportation sought to balance its responsibilities to address regional mobility needs while being fiscally responsible and sensitive to local communities.

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	<p>Document Created: 7/25/2013 2:14:06 PM by Web Comment Form</p> <p>PMPC is steadfastly opposed to any alignment of the Loop 202 South Mountain Freeway that allows for trespass onto the Mountain Preserve or for any excavation into the South Mountain what so ever. These mountain preserves ensures a lifestyle that 80% of Arizona voters consistently support. The mountain preserves are unique and are for people and wildlife, not for vehicle trespass. PMPC does not agree with many of the DEIS assumptions finding them objectionable and deficient in the following analysis areas.</p> <p>1 Unacceptable Pre-Decisional Actions: ADOT has made some pre-decisional actions with the purchase of property before the Draft Environmental Impact Statement (DEIS) was released. Phoenix Mountains Preservation Council (PMPC) questions the legality of this action and the entire DEIS when it appears ADOT has already made considerable financial investment to establish the alignment for the South Mountain Freeway rather than follow the prescribed process.</p> <p>2 Dismal Wildlife Connectivity: The DEIS does not meet the minimal requirements for coordination and analysis of wildlife resources. The Arizona Game and Fish Department was consulted in 2009 during scoping. The current connection to the Estrella Mountains allows for passage of mule deer, javelina, bobcat, and mountain lion. There is no evidence of further efforts to ascertain wildlife connectivity needs or possible mitigation. The Sonoran desert tortoise provides additional evidence of inadequate cumulative analysis given its status as a U.S. Fish & Wildlife Service's candidate species. The mountain ridge area slated for demolition meets the definition for the tortoise's habitat.</p> <p>3 Unreasonable Taking of Mountain Preservation Lands: The DEIS states in Figure 5-7 Public Parkland the avoidance of taking over 30 acres of the Preserve is "not prudent and feasible". The taking of this mountainside will destroy important archeological, spiritual, cultural and recreational sites with no realistic or reasonable mitigation possible in the study. The study failed to recognize and address new two trails, Gila and Bursera Trails, created in the southwest end of the Preserve in 2010.</p> <p>4 Outdated Data Projections Used: The DEIS is based on outdated data projections that are now six to eight years old. The analysis does not acknowledge the impact the major economic downturn had and it brings into question the validity of projected growth levels put forth in the DEIS. In all the alternative studies, the DEIS does not provide one alternative analysis to the demolition of the southwest ridges of South Mountain. Furthermore, nowhere in this study is there an assessment of hazardous material truck traffic nor any mention of managing this truck traffic and the consequences of a serious hazard waste incident.</p> <p>5 Over 3 million visitors come to South Mountain Park/Preserve annually, according to City of Phoenix statistics. Destroying any part of the mountain to align a high-capacity freeway will only have a negative impact on tourism and the many unique resources the park offers.</p> <p>6 We urge ADOT to stop providing studies that do not accurately or thoroughly address the impact this freeway has on South Mountain. It's time to stop the \$20 million and more in wasted tax payer's money to study the environmental impact and design for an alignment that no longer makes sense.</p> <p>7</p>

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7	Hazardous Materials	<p>Arizona highways, as are most highways across the United States, are open to all kinds of traffic, so long as the cargo being carried is in accordance with U.S. Department of Transportation regulations for the specific type of cargo. The Arizona Department of Transportation has a few locations in the state with hazardous cargo restrictions, but these restrictions are based on emergency response issues or roadway design limitations specific to that location. For example, the Interstate 10 Deck Park Tunnel has certain hazardous cargo transport restrictions because of the limited ability for emergency responders to address a hazardous materials incident in the tunnel. The South Mountain Freeway, if implemented, is expected to operate under the same rules as other similar facilities in the state; transport of hazardous cargo would be expected to be permissible (see text box on page 4-157 of the Final Environmental Impact Statement).</p> <p>The Arizona Department of Public Safety (which includes the State Highway Patrol) has primary responsibility for enforcing traffic laws. The Department of Public Safety also has primacy when calling in support for traffic accidents, including hazardous materials accidents (see text box on page 4-157 of the Final Environmental Impact Statement). The Arizona Department of Transportation maintains a list of contractors who provide emergency response services, as well as local municipalities whose fire and police departments operate in cooperation with the Department of Public Safety on incidents within their jurisdiction. Requirements for shippers are maintained by the Arizona Department of Transportation’s Enforcement Compliance Division.</p> <p>In the event of an incident with a hazardous materials issue on a State or federal highway, the emergency responders contact the Arizona Department of Transportation’s Traffic Operations Center to report the incident. The Traffic Operations Center then contacts the Arizona Department of Transportation’s Safety and Risk Management group, who responds to the accident scene and assesses needs in concert with the Incident Commander from the responding agency with jurisdiction. If requested, the Arizona Department of Transportation can assist cleanup activities by engaging specialty subcontractors with whom the Arizona Department of Environmental Quality has contracts for such support. The Arizona Department of Transportation’s Safety and Risk Management group’s charge is primarily public health protection, with cleanup support being secondary.</p>

Code	Comment Document
	<div><div><div><div><div></div><div>From: Projects</div><div>To: ADOT</div><div>Subject: FW: Opposition to South Mountain Freeway Construction</div><div>Date: Friday, June 14, 2013 8:08:05 AM</div></div></div><div></div></div><div></div><div><div><div><div></div><div>From: Hnmusician@aol.com [mailto:Hnmusician@aol.com]</div><div>Sent: Thursday, June 13, 2013 4:38 PM</div><div>To: Projects</div><div>Subject: Opposition to South Mountain Freeway Construction</div></div></div><div><div><div><div></div><div>Phoenix Mountains Preservation Council</div><div>Opposition to South Mountain Freeway Construction</div></div></div><div><p>PMPC is an organization put into place by Arizona visionaries, and for the last 40 years PMPC has continued to monitor and anticipate the impact that rapid population growth would have on our precious Mountain Preserve system.</p><p>PMPC is steadfastly opposed to any alignment of the Loop 202 South Mountain Freeway that allows for trespass onto the Mountain Preserve or for any excavation into the South Mountain what so ever. These mountain preserves ensures a lifestyle that 80% of Arizona voters consistently support. The mountain preserves are unique and are for people and wildlife, not for vehicle trespass. PMPC does not agree with many of the DEIS assumptions finding them objectionable and deficient in the following analysis areas.</p><div><div>1</div><div><p><u>Unexceptable Pre-Decisional Actions:</u> ADOT has made some pre-decisional actions with the purchase of property before the Draft Environmental Impact Statement (DEIS) was released. Phoenix Mountains Preservation Council (PMPC) questions the legality of this action and the entire DEIS when it appears ADOT has already made considerable financial investment to establish the alignment for the South Mountain Freeway rather than follow the prescribed process.</p></div></div><div><div>2</div><div><p><u>Dismal Wildlife Connectivity:</u> The DEIS does not meet the minimal requirements for coordination and analysis of wildlife resources. The Arizona Game and Fish Department was consulted in 2009 during scoping. The current connection to the Estrella Mountains allows for passage of mule deer, javelina, bobcat, and mountain lion. There is no evidence of further efforts to ascertain wildlife connectivity needs or possible mitigation. The Sonoran desert tortoise provides additional evidence of inadequate cumulative analysis given its status as a U.S. Fish & Wildlife Service’s candidate species. The mountain ridge area slated for demolition meets the definition for the tortoise’s habitat.</p></div></div><div><div>3</div><div><p><u>Unreasonable Taking of Mountain Preservation Lands:</u> The DEIS states in Figure 5-7 Public Parkland the avoidance of taking over 30 acres of the Preserve is “not prudent and feasible”. The taking of this mountainside will destroy important archeological, spiritual, cultural and recreational sites with no realistic or reasonable mitigation possible in the study. The study failed to recognize and address new two trails, Gila and Bursera Trails, created in the southwest end of the Preserve in 2010.</p></div></div><div><div>4</div><div></div></div><div><div>5</div><div><p><u>Outdated Data Projections Used:</u> The DEIS is based on outdated data projections that are now six to eight years old. The analysis does not acknowledge the impact the major</p></div></div></div></div></div></div>

Code	Issue	Response
1	Alternatives	<p>The comment suggests the environmental impact statement process was biased by a history of property acquisitions within the Study Area. More specifically, properties falling within the limits of the Preferred Alternative, as identified in the Final Environmental Impact Statement, were targeted for acquisition.</p> <p>As noted in text on page 3-54 of the Final Environmental Impact Statement, the Arizona Department of Transportation began acquiring land for the original alignment in 1988. Between 1988 and 2001, the Arizona Department of Transportation acquired approximately 293 acres. Most of this land (258 acres) is located in the Eastern Section along Pecos Road. In 2006, the Arizona Department of Transportation began protective and hardship land acquisition in the alignment right-of-way footprint for the W59 and E1 Alternatives. Between 2006 and October 2013, the Arizona Department of Transportation purchased 326 acres (303 in the Western Section and 23 in the Eastern Section).</p> <p>The process for hardship and advanced acquisitions is explained in text on page 4-50 of the Final Environmental Impact Statement.</p> <p>The comment infers that by taking such action, the objective equal consideration of the alternatives studied in detail in the Draft and Final Environmental Impact Statements is tainted. Advanced acquisitions in parallel to a National Environmental Policy Act environmental determination process is not unprecedented and is common practice. In this case, property acquisitions by the Arizona Department of Transportation for purposes of implementing the proposed action are done at risk as communicated to the agency by the Federal Highway Administration. If another action alternative were to be ultimately selected, the agency would likely have to place the acquired properties on the market for sale and purchase. The Arizona Department of Transportation attempts to balance the risk against its mission of timely delivery of transportation infrastructure to the driving public. Further, Federal Highway Administration regulations do not allow the ownership of right-of-way to be a factor in the decision regarding the selection of an alternative.</p>
2	Biology, Plants, and Wildlife	<p>The section, <i>General Impacts on Vegetation, Wildlife, and Wildlife Habitat</i>, beginning on page 4-136 of the Final Environmental Impact Statement, discloses by what means the proposed action and its alternatives would affect vegetation, wildlife, and wildlife habitat. A Biological Evaluation was submitted to the U.S. Fish and Wildlife Service, Arizona Game and Fish Department, and Gila River Indian Community Department of Environmental Quality that addressed threatened, endangered, and candidate species, including the Sonoran desert tortoise. The information used to prepare the analysis in the Draft Environmental Impact Statement (page 4-122) was based on 2011 information retrieved from the Arizona Game and Fish Department (Gopherus agassizii, draft unpublished abstract compiled and edited by the Heritage Data Management System, Phoenix). Current information on threats and connectivity strategies was included in the Biological Evaluation. The U.S. Fish and Wildlife Service concurred with the species determinations in the Biological Evaluation (see Appendix 1-1 of the Final Environmental Impact Statement).</p> <p>Connectivity is planned to allow wildlife movement beneath the freeway in multiuse crossings (see page 4-137 of the Final Environmental Impact Statement). The Federal Highway Administration and Arizona Department of Transportation have committed to providing mitigation by including multifunctional crossing structures designed for wildlife and for limited human use as well as culverts designed for connectivity for smaller species. Wildlife-friendly design information would be considered during the design of drainage and crossing structures for the freeway (see <i>Mitigation</i>, beginning on page 4-138 of the Final Environmental Impact Statement).</p>

(Responses continue on next page)

Code	Comment Document
6	economic downturn had and it brings into question the validity of projected growth levels put forth in the DEIS. In all the alternative studies, the DEIS does not provide one alternative analysis to the demolition of the southwest ridges of South Mountain. Furthermore, nowhere in this study is there an assessment of hazardous material truck traffic nor any mention of managing this truck traffic and the consequences of a serious hazard waste incident.
7	<p>Over 3 million visitors come to South Mountain Park/Preserve annually, according to City of Phoenix statistics. Destroying any part of the mountain to align a high-capacity freeway will only have a negative impact on tourism and the many unique resources the park offers.</p> <p>We urge ADOT to stop providing studies that do not accurately or thoroughly address the impact this freeway has on South Mountain. It's time to stop the \$20 million and more in wasted tax payer's money to study the environmental impact and design for an alignment that no longer makes sense.</p> <p>Barbara Bingham Deutscher</p> <p>3704 East Ahwatukee Drive Phoenix, AZ. 85044-3807 480-893-1033 Deut3704@aol.com</p> <hr/> <p><small>Confidentiality and Nondisclosure Notice: This email transmission and any attachments are intended for use by the person(s)/entity(ies) named above and may contain confidential/privileged information. Any unauthorized use, disclosure or distribution is strictly prohibited. If you are not the intended recipient, please contact the sender by email, and delete or destroy all copies plus attachments.</small></p>

Code	Issue	Response
3	Section 4(f) and Section 6(f)	<p>Cultural and religious places of importance, like the South Mountains, are acknowledged in the Draft Environmental Impact Statement in several locations, notably pages 4-132 and 5-26. The description in the Draft and Final Environmental Impact Statements is based on input received from the Gila River Indian Community and its members and other Indian Nations and their members.</p> <p>The Final Environmental Impact Statement includes discussion on efforts to avoid use of Phoenix South Mountain Park/Preserve, starting on page 5-16. Measures to minimize harm to the park as a result of the proposed freeway start on page 5-23.</p> <p>The portion of the park that would be used for the proposed freeway would be 31.3 acres, or approximately 0.2 percent of the park's approximately 16,600 acres (see Final Environmental Impact Statement pages S-39 and 5-31). The activities that make the park such a highly valued resource (recreational activities, interaction with the Sonoran Desert) would remain.</p>
4	Section 4(f) and Section 6(f)	<p>South Mountain's newest trails are the Bursera and Pyramid Trails (see Final Environmental Impact Statement page 5-8). The E1 Alternative is approximately 1 mile south of the Pyramid Trail and even farther from the Bursera Trail; thus, it would not affect either trail. The trails have walk-in access from Chandler Boulevard and 19th Avenue, with on-street parking. This walk-in access would be north of and adjacent to the planned extension of Chandler Boulevard and, thus, would not be directly affected. The walk-in access point and the part of the Pyramid Trail at the access point are located adjacent to a residential neighborhood and the City of Phoenix's planned Chandler Boulevard Extension. These trails are typically used for high-intensity recreational activities such as running, hiking, and biking, not noise- or viewshed-sensitive activities. All proposed action alternatives would span existing and proposed trails to avoid impacts. However, during construction (if an action alternative were selected), trails that would be spanned or would be near potential freeway construction would be closed for limited times for safety reasons. Closures would necessitate that trail users detour around construction sites to rejoin the trails farther along their length. According to Phoenix South Mountain Park/Preserve rangers, the Gila Trail—although well-defined—is not a designated trail within the park. That said, the Gila Trail would not be affected by the proposed freeway or by the Chandler Boulevard Extension. The Final Environmental Impact Statement Appendix page A665 contains information directly from the Phoenix General Plan and early coordination with the City of Phoenix Parks Department. The trails in the preserve are exceptions to this statement and were always meant as such. The trails within 1/4 mile of the proposed alternatives were treated separately, as in the case of the Maricopa County Regional Trails System. Should an alternative be selected, the Arizona Department of Transportation and Federal Highway Administration would work closely with the City of Phoenix during final design to ensure the connectivity of trails is maintained, whether they are eligible as Section 4(f) resources or not.</p>

Code	Comment Document

Code	Issue	Response
5	Purpose and Need	<p>The analyses in the Draft Environmental Impact Statement used socioeconomic and traffic projections at the regional analysis zone and traffic analysis zone levels. At the time of publication of the Draft Environmental Impact Statement, Census 2010-based socioeconomic data at the regional analysis zone and traffic analysis zone levels had not been adopted by the Maricopa Association of Governments and were not available to the project team. Therefore, the data used in the Draft Environmental Impact Statement were the most appropriate information available. The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future.</p>
6	Alternatives	<p>Several action alternatives were subject to the alternatives development and screening process; not just the E1 Alternative and alternatives located on the Gila River Indian Community (Figure 3-6 on page 3-10 of the Final Environmental Impact Statement illustrates a representation of such alternatives).</p> <p>Ultimately the other alternatives were eliminated from further study in the screening process and the Gila River Indian Community decided not to give permission to study alternatives on its land (see Final Environmental Impact Statement page 3-25). Therefore, the Arizona Department of Transportation, with concurrence from Federal Highway Administration, identified the E1 Alternative as the eastern section of the Preferred Alternative (which includes the W59 Alternative in the Western Section of the Study Area). In reaching its determination, the Arizona Department of Transportation sought to balance its responsibilities to address regional mobility needs while being fiscally responsible and sensitive to local communities.</p>

Code	Comment Document

Code	Issue	Response
7	Hazardous Materials	<p>Arizona highways, as are most highways across the United States, are open to all kinds of traffic, so long as the cargo being carried is in accordance with U.S. Department of Transportation regulations for the specific type of cargo. The Arizona Department of Transportation has a few locations in the state with hazardous cargo restrictions, but these restrictions are based on emergency response issues or roadway design limitations specific to that location. For example, the Interstate 10 Deck Park Tunnel has certain hazardous cargo transport restrictions because of the limited ability for emergency responders to address a hazardous materials incident in the tunnel. The South Mountain Freeway, if implemented, is expected to operate under the same rules as other similar facilities in the state; transport of hazardous cargo would be expected to be permissible (see text box on page 4-166 of the Final Environmental Impact Statement).</p> <p>The Arizona Department of Public Safety (which includes the State Highway Patrol) has primary responsibility for enforcing traffic laws. The Department of Public Safety also has primacy when calling in support for traffic accidents, including hazardous materials accidents (see text box on page 4-166 of the Final Environmental Impact Statement). The Arizona Department of Transportation maintains a list of contractors who provide emergency response services, as well as local municipalities whose fire and police departments operate in cooperation with the Department of Public Safety on incidents within their jurisdiction. Requirements for shippers are maintained by the Arizona Department of Transportation’s Enforcement Compliance Division.</p> <p>In the event of an incident with a hazardous materials issue on a State or federal highway, the emergency responders contact the Arizona Department of Transportation’s Traffic Operations Center to report the incident. The Traffic Operations Center then contacts the Arizona Department of Transportation’s Safety and Risk Management group, who responds to the accident scene and assesses needs in concert with the Incident Commander from the responding agency with jurisdiction. If requested, the Arizona Department of Transportation can assist cleanup activities by engaging specialty subcontractors with whom the Arizona Department of Environmental Quality has contracts for such support. The Arizona Department of Transportation’s Safety and Risk Management group’s charge is primarily public health protection, with cleanup support being secondary.</p>

Code Comment Document

From: [Projects](#)
To: [ADOT](#)
Subject: FW: Question Regarding: Filing written comments Re: Loop 202 S Mountain Freeway DEIS
Date: Friday, July 19, 2013 10:42:47 AM
Attachments: [image001.png](#)
Importance: High

Thank you,
Matthew Eberhart
Community Relations Officer

1655 W Jackson St. MD 126F
Phoenix, AZ 85007
602-712-2060

azdot.gov

The logo for ADOT Communications. It features the letters "ADOT" in a bold, stylized font. The "A" is red, the "D" is green, the "O" is blue, and the "T" is red. Below "ADOT" is the word "Communications" in a smaller, black, sans-serif font. The entire logo is set against a white background with a thin red line above it.

From: Howard Shanker [mailto:howard@shankerlaw.net]
Sent: Friday, July 19, 2013 10:28 AM
To: Projects
Cc: Steve Brittle
Subject: Question Regarding: Filing written comments Re: Loop 202 S Mountain Freeway DEIS
Importance: High

We would like to file our comments on the Draft EIS for the SMF via hand delivery (on or before July 24). Can you please let me know where (and/or to whom) the comments should be delivered.
Thank you. I look forward to your prompt response.

Howard M. Shanker
The Shanker Law Firm, PLC
www.ShankerLaw.net

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700 E. Baseline Rd., Bldg. B 201 E. Birch Avenue, Ste. 10
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Code	Issue	Response

(Comment codes begin on next page)

Code	Comment Document
	<p>IRS CIRCULAR 230 DISCLOSURE: To ensure compliance with requirements imposed by the IRS, we inform you that, to the extent this communication (or any attachment) addresses any tax matter, it was not written to be (and may not be) relied upon to (i) avoid tax-related penalties under the Internal Revenue Code, or (ii) promote, market or recommend to another party any transaction or matter addressed herein (or in any such attachment).</p> <hr/> <p>Confidentiality and Nondisclosure Notice: This email transmission and any attachments are intended for use by the person(s)/entity(ies) named above and may contain confidential/privileged information. Any unauthorized use, disclosure or distribution is strictly prohibited. If you are not the intended recipient, please contact the sender by email, and delete or destroy all copies plus attachments.</p>

(Comment codes begin on next page)

Code	Issue	Response

Code Comment Document

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AND TOHONO O'ODHAM TRIBAL COURTS;
AZ. FEDERAL DISTRICT COURT;
NINTH CIRCUIT; AND U.S. SUPREME COURT

July 23, 2013

VIA HAND-DELIVERY

Arizona Dep't of Transportation
Environmental Planning Group
1611 W. Jackson Street
Phoenix, Arizona 85007
Att: Yvonne M. Gasca

**Re: Comments on the Loop 202 South Mountain Freeway Draft Environmental
Impact Statement ("DEIS")**

Dear Ms. Gasca:

These comments on the DEIS, including this letter of transmission and all of the reports/attachments hereto, are submitted by and on behalf of:

Protecting Arizona Resources and Children, Inc. (PARC)
The Foothills Community Association
The Foothills Club West Community Association
The Lakewood Community Association
The Calabrea Community Association
Don't Waste Arizona, Inc. (DWAZ)
Gila River Alliance for a Clean Environment (GRACE)
Gila River Environmental Youth (GREY)
Patricia Lawlis; Timothy Lank; Chad Blostone;
Michael Hinz; Chris Boettcher
Phoenix Mountains Preservation Council (PMPC)

Commenters can be reached through counsel:

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FLAGSTAFF | 201 East Birch Avenue, Suite 10 | Flagstaff, Arizona 86001-5254

Code	Issue	Response
1		Initial comments summarize the comments to follow. Responses to specific comments appear below.

Code	Comment Document
	Re: PARC et al Comments on the SMF DEIS July 23, 2013 Page 2
2	<p>Based on a review of the data, it appears that the DEIS is no more than a thinly veiled, very expensive attempt to manipulate the public into believing that construction of the preferred alternative(s) for the Loop 202 South Mountain Freeway is a good thing. This DEIS, and the actions that created it, represent, <i>inter alia</i>, a gross abuse of the public trust, a violation of the processes required by the National Environmental Policy Act ("NEPA") and Section 4(f) of the Transportation Act, and an approximately \$3 billion waste of tax payers' money. Modern history is replete with examples of fraud, waste, and/or abuse on a large scale. Unlike many of these schemes, however, the South Mountain Freeway project does not just involve the misuse and/or misappropriation of large sums of money. The South Mountain Freeway will have a significant negative impact on the health of thousands of people, including children, who live and/or go to school near the proposed right-of-way. It will require the relocation of hundreds of homes, and dry up lakes and golf courses in the Ahwatukee area. The project will pollute the air, bombard residents with noise, negatively impact recreational opportunities, devalue homes, re-route large numbers of commercial trucks through an historic bedroom community, and destroy a large segment of the South Mountain Park – a valuable natural resource that is sacred to the Gila River Indian Community and other tribes in the area.</p>
3	<p>Notwithstanding the negative impacts and cost, construction and utilization of the proposed South Mountain Freeway will result in capacity deficiencies at levels comparable to the No Action Alternative on freeways and arterials throughout the Metropolitan Area. That is, even if we assume, <i>arguendo</i>, that all of the data presented in the DEIS is accurate, according to ADOT's own estimation, the Loop 202 South Mountain Freeway, if built, will not improve traffic flow in areas of congestion on freeways and surface streets in the metropolitan Phoenix area. Regrettably, this is not just hyperbole. Indeed, the consultants/experts who helped to provide the included reports address each of these issues (and more) with specificity. As discussed herein, these issues were either ignored in the DEIS or were presented in the DEIS in a false and/or misleading light.</p>
4	<p>The DEIS utilizes bad data, inappropriate modeling techniques, and presents misguided and misleading conclusions throughout in a Procrustean effort to support selection of the "preferred alternative." Even the population projections used to demonstrate need for the project are based on bad data. The DEIS takes an exceptionally high growth period – using 2005 census data – and assumes such growth will continue unabated for the next 30 years. Census data from 2010, which was readily available to ADOT, however, objectively confirms that ADOT's projections were fatally flawed and grossly exaggerated from the outset. The DEIS expressly puts off analyses of whole categories of impacts until the "design phase" of construction, even though such analysis is an essential aspect of the decision-making process that preparation of a DEIS is supposed to promote. Moreover, ADOT identifies only one action alternative for the</p>

Code	Issue	Response
2	Environmental Impact Statement Process	The Arizona Department of Transportation, the project sponsor, working in close consultation with the Federal Highway Administration, the lead federal agency for the proposed action, and in cooperation with the U.S. Army Corps of Engineers, the U.S. Bureau of Indian Affairs, and the Western Area Power Administration, prepared the Draft and Final Environmental Impact Statements and Section 4(f) Evaluations for the South Mountain Freeway in accordance with: the National Environmental Policy Act of 1969 [42 United States Code § 4332(2)(c)], Section 4(f) of the U.S. Department of Transportation Act of 1966 (49 United States Code § 303, as amended), and Section 404 of the Clean Water Act of 1977 (33 United States Code § 1251). The Draft and Final Environmental Impact Statements and Section 4(f) Evaluations: 1) satisfy the Federal Highway Administration's and Arizona Department of Transportation's environmental analysis requirements; 2) provide a comparison of the social, economic, and environmental impacts that may result from implementation of the proposed action—construction and operation of a major transportation facility; and 3) identify measures to avoid, reduce, or otherwise mitigate adverse impacts. The Draft and Final Environmental Impact Statements includes sufficient preliminary design information to compare alternatives. Responses to specific comments appear below.
3		Responses to specific comments appear below.
4		Responses to specific comments appear below.

Code	Issue	Response
7		Responses to specific comments appear below.
8		Responses to specific comments appear below.

Code Comment Document

Re: PARC et al
Comments on the SMF DEIS
July 23, 2013
Page 5

various alternatives that should have been considered in the DEIS but were not. Indeed, only one route is considered for the eastern alignment. Mr. Basmaciyen further finds, in part, that "[e]ven assuming arguendo that the demographics used to demonstrate the need for the project are accurate (they are not), none of the Action Alternatives considered will alleviate the anticipated capacity deficiencies identified in the Purpose and Need. Despite the expenditure of about \$2 billion to \$3 billion to build the South Mountain Freeway and despite the displacement of many residences and business establishments, there will be capacity deficiencies at levels comparable to the No Action Alternative on freeways and arterials throughout the Metropolitan Area and on the South Mountain Freeway itself"

Further, according to Mr. Basmaciyen, "[b]ased on these traffic and circulation considerations, none of the Action Alternatives should have been selected as the preferred Alternative. Indeed, when correct socio-economic data is used, the No Action Alternative largely achieves the desired outcomes without exorbitant costs and/or negative impacts."

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4. SWCA Environmental Consultants: The SWCA team reviewed the DEIS for its discussion on water, air, noise and socio-economic impacts and provided a comment "matrix". The conclusions included in the matrix are too voluminous to outline here. SWCA did, however, confirm, in part, that: (1) there is no technical or scientific rationale or justification for why the "Study Area" is defined the way it is; (2) otherwise viable alternatives were eliminated simply because they did not fit into the arbitrarily defined "Study Area"; (3) ADOT used the wrong modeling program and faulty data in presenting its analysis of impacts of air pollution; and (4) there is essentially no discussion of the impact construction would have on the wells that currently serve the Lakewood and Foothills communities – this project will likely dry up the lakes and golf courses in Ahwatukee.

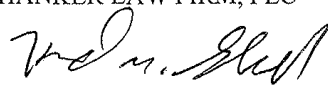
10

5. Richard Haddow: Mr. Haddow is a former District Environmental Coordinator with the Arizona Department of Transportation (ADOT). According to Mr. Haddow, in part, "[t]he use of data, the methodology employed, and the conclusions presented in the DEIS are absolutely without technical merit and do not comply with the fundamental concepts and purpose of an environmental impact statement. The DEIS does not protect or properly inform the citizens of the level of risk to public health by building the freeway." Further, according to Mr. Haddow, the DEIS completely fails to consider the terrain that will be impacted by the project. According to Mr. Haddow, in part, "[n]otwithstanding that this NEPA process has taken over 12 years, ADOT has not conducted any studies on atmospheric and/or ambient quality/conditions in the Ahwatukee area. As a result, there is no valid baseline data to input into air quality models that predict how bad the pollution in the area will be. Sites listed for reference to determine air quality for the citizens are nowhere near the impacted area and should not be used to determine air quality north of the Pecos Road alignment. Similarly, there are no temperature soundings for accurate air shed profiling. There are no air toxics

Code	Issue	Response
9		Responses to specific comments appear below.
10		Responses to specific comments appear below.

Code	Comment Document
	<div>Re: PARC et al Comments on the SMF DEIS July 23, 2013 Page 6</div> <p>measurements taken to understand the current components of the ambient air quality, and there are no wind speed and direction instruments installed as necessary to apply good science for modeling. . .”</p> <div>11</div> <p>6. Stephen Brittle: Mr. Brittle is the President and Co-Founder of Don't Waste Arizona, Inc. (DWAZ), a statewide non-profit environmental organization that was formed in 1990. Mr. Brittle was a member of Maricopa County Local Emergency Planning Committee for ten years. He is also a private sector consultant who has worked on various environmental and hazardous materials issues. Mr. Brittle provides comments on, in part, the CANAMEX route (one reason why the proposed Freeway will simply act as a truck bypass for high polluting commercial trucks originating in Mexico), Environmental Justice issues, Air Toxics, and hazardous materials transportation. He, again, finds the DEIS lacking on all fronts. According to Mr. Brittle, in part, “the DEIS fails to mention and analyze the risks from a catastrophic release of hazardous chemicals due to a transportation incident . . . In the matter of evacuation of Ahwatukee, the GRIC community near the freeway, and Laveen, a detailed traffic flow analysis and evacuation plan . . . must be prepared. . . If the analysis shows that the community . . . cannot be evacuated within 5-10 minutes, then the No Build option is the only logical and humane result. . . Since Ahwatukee is not six miles wide from the Pecos Road to South Mountain, it is easy to conclude that, in the event of a catastrophic release of chlorine from a 17-ton tanker of chlorine gas, all of Ahwatukee would have to either evacuate or shelter in place. . . Further, an ALOHA modeling indicates that buildings within two miles of the point where the chlorine release occurred would have high enough levels of chlorine gas infiltrate into them to become lethal, which means that shelter in place strategies would not work. . .” Mr. Brittle also questions why HDR, the consultants who prepared the DEIS for ADOT, did not include any analysis of the risks associated with hazardous materials transport – HDR was the same contractor who prepared the November 26, 2008, SPR 624 Hazardous Materials Transportation in Arizona Literature Review with Findings Report for ADOT.</p> <p>Thank you for your consideration. As outlined herein and supported through the attached reports/comments, there is no valid justification for the construction of the South Mountain Loop 202 Freeway.</p> <p>NEPA requires a fully informed decisional process through, in part, the preparation of a DEIS. The DEIS, however, treats the crucial decision to proceed with a \$3 billion tax payers’ funded project, not as an impending choice to be pondered, but as a foregone conclusion to be rationalized. The DEIS provides flawed analyses, generalities, and heavy-handed self-justifications. This is a direct violation of applicable law and a gross abuse of the public trust. No reasoned decision could be made on the basis of the DEIS that, for example, improvements to existing highways and arterials would not better serve regional transportation needs; that public transportation alternatives are not viable;</p>

Code	Issue	Response
11		Responses to specific comments appear below.

Code	Comment Document
	<div>Re: PARC et al Comments on the SMF DEIS July 23, 2013 Page 7</div> <div>or that abandonment of the project is impractical.</div> <div>If you have any questions or concerns, please feel free to contact me directly.</div> <div>Sincerely,</div> <div>THE SHANKER LAW FIRM, PLC</div> <div></div> <div>Howard M. Shanker For the Firm</div>

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Code	Comment Document
	<div><p>TABLE OF CONTENTS July 23, 2013</p><p>Reports:</p><p>1 <i>The Adverse Human Health Effects of Air Pollution that Result from Traffic-Related Air Pollution</i> by George D. Thurston, Sc.D. dated July 18, 2013.</p><p>2 <i>Response to ADOT Draft Environmental Impact Statement (DEIS) 1. Purpose and Need A. Need Based on Socioeconomic Factors</i> by Kevin Kane dated July 24, 2013.</p><p>3 Comments by Don't Waste Arizona, Inc. President, Stephen Brittle.</p><p>4 <i>Review and Critique of DEIS for Loop 202 (South Mountain Freeway)</i> by Herman Basmaciyar, P.E. dated July 17, 2013.</p><p>5 SWCA Comments on ADOT South Mountain DEIS (April 2013).</p><p>6 South Mountain Freeway 202 DEIS Comments by Rick Haddow.</p><p>7 <i>Comments on the SMF DEIS Re: Cultural Resources Impacts</i> by Samantha Skenedore, Of Counsel: The Shanker Law Firm, PLC.</p><p>Additional Comments:</p><p>1 Patricia Lawlis Comments on the Draft Environmental Impact Statement (DEIS) for the proposed South Mountain Freeway (SMF), July 2013.</p><p>2 Comment 1-10.</p><p>3 Comments on DEIS Discussion of Section 4(F) of the Transportation Act.</p><p>4 Reevaluate Purpose and Need Statement.</p><p>5 Lakewood Community Association's Concerns & Response to DEIS for Loop 202 (South Mountain Freeway) dated July 20, 2013.</p><p>6 Comments of Nicoli V. Kuminoff on the DEIS for South Mountain Freeway, dated July 21, 2013.</p><p>7 Comments by Hugh S. Mason dated July 21, 2013, resident of Phoenix and the Ahwatukee area and Associate Professor at Arizona State University, School of Life Sciences.</p></div>

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	<div><div></div><div><div>8</div><div>Comment by Phoenix Mountains Preservation Council</div></div><div><div>Attachments:</div><div><div>1</div><div>Brown and Caldwell Study dated August 24, 1995</div></div><div><div>2</div><div>Correspondence Foothills Golf Re: Water</div></div><div><div>3</div><div>Hydrologist Statement</div></div><div><div>4</div><div>Well Completion Report for the Foothills Golf Club North and South Wells dated April 23, 1996.</div></div><div><div>5</div><div>South Mountain Land Acquisitions - The spreadsheet was created by ADOT on June 11, 2013. It has W in the right side if it is a parcel in the western alignment; it has an E in the right side if it is a parcel in the eastern alignment. Parcels 7-11316 and 7-10612 are two parcels in the western alignment that were not included in the spreadsheet. The parcel transmittal sheet for each is also attached.</div></div></div></div>

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Code	Issue	Response

Code	Comment Document
	<p><u>The Adverse Human Health Effects of Air Pollution that Result from Traffic-Related Air Pollution</u></p> <p>SUBMITTED ON BEHALF OF PARC ET AL. IN RESPONSE TO ADOT DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS) REGARDING THE SOUTH MOUNTAIN FREEWAY</p> <p>July 18, 2013</p> <p></p> <p>George D. Thurston, Sc. D. 3 Catherine Court Chester, NY 10918</p>

Code	Issue	Response

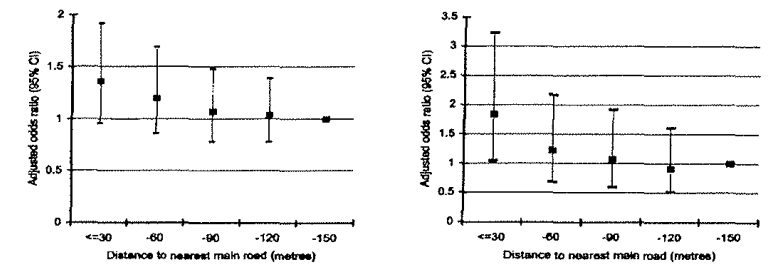
Code	Comment Document
	<p><i>Background & Qualifications</i></p> <p>I am a full Professor at the New York University (NYU) School of Medicine in the Department of Environmental Medicine. I have also served as the Deputy Director of the NYU Particulate Matter Health Research Center, and am presently the Director of the Program in Exposure Assessment and Health Effects in my department at the School of Medicine.</p> <p>I received my undergraduate degree in Environmental Engineering from Brown University in 1974, and my Doctorate of Science (Sc.D.) in Environmental Health Sciences from the Harvard University School of Public Health in 1983. I served on the New York State Department of Environmental Conservation's Air Management Advisory Committee from 1991 to 1996, and was Chairman of the Health and Environment Panel of the Canadian Joint Industry/Government Study of Sulfur in Gasoline and Diesel Fuels in 1997.</p> <p>I have published extensively regarding the human health effects of inhaled air pollutants, particularly in relation to asthma attacks, hospital admissions, and human mortality. I have been called upon by both the U.S. House of Representatives and the U.S. Senate multiple times in recent years to provide testimony before them regarding the human health effects of air pollution.</p> <p>I have served as an advisor to the U.S. EPA regarding the human health effects of air pollution as a member of the Clean Air Scientific Advisory Committee (CASAC) panel on Sulfur Oxides and Nitrogen Oxides, and as a contributing author of various EPA Integrated Science Assessments (ISAs), which are relied upon by the EPA to set air pollution air quality standards in the US. A copy of my professional curriculum vitae is attached to this letter, and it accurately represents my relevant education, training, and experience.</p> <p><i>Introduction</i></p> <p>Traffic is an increasingly dominant contributor to air pollution in Phoenix, and elsewhere in the United States. Cars, buses, trucks and other motorized vehicles are amongst the largest sources of air pollution that have been clearly linked to adverse health effects (e.g., see HEI, 2010). These adverse effects of traffic related air pollution have been documented in cities around the world, across the nation, and in Phoenix, AZ. Most people are exposed to air pollution from road traffic on a daily basis, whether as a result of residing at homes located near highways, or driving, walking, or standing along busy streets. Vehicle engines are known to produce a number of air pollutants that pose risks to public health. When engines burn fuel (gasoline or diesel), chemicals such as fine particulate matter, ultrafine particles (UFP), nitrogen oxides, carbon monoxide, volatile organic</p>

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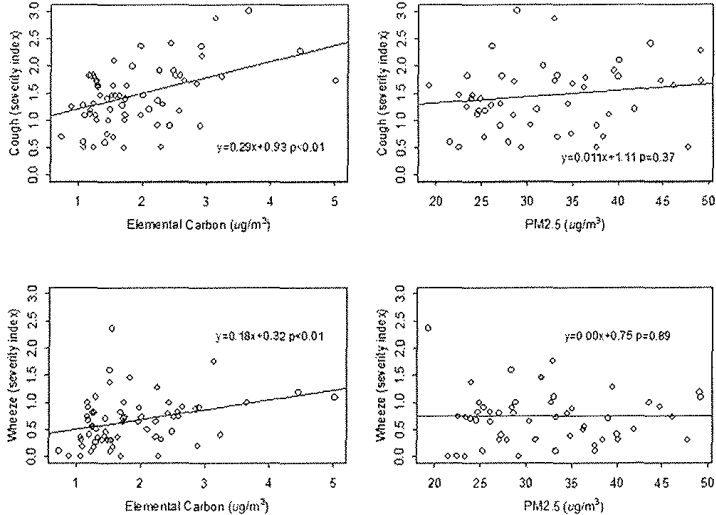
Code	Issue	Response
12	Air Quality	The contribution of mobile sources (traffic) to air quality in the Study Area is addressed beginning on page 4-68 of the Final Environmental Impact Statement.

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13	<p>THE HEALTH EFFECTS OF AIR POLLUTION FROM ROAD TRAFFIC</p> <p>The epidemiological literature on the health effects of traffic related air pollution is growing rapidly. The findings of recent scientific studies indicate that traffic is a significant contributor to the adverse effects of air pollution on public health, but this evidence is not sufficiently acknowledged or considered by the DEIS. Studies of air pollution near roadways, including my own in New York City, have provided insights into the spatially and temporally dynamic nature of traffic related pollution. The epidemiological studies on traffic and health have largely focused on the consequences of exposures incurred by living near large roadways, such as freeways in southern California. Air pollution from road traffic has been linked to a variety of negative health effects. To date, the findings indicate associations of traffic indicators with increased risk for multiple adverse health effects that may include asthma and allergic diseases, cardiac effects, respiratory symptoms, reduced lung function, inhibited lung function growth and development, premature mortality, adverse reproductive outcomes, and lung cancer, as elaborated below.</p> <p>• <i>Asthma and allergic disease</i></p> <p>Numerous studies have documented the role of traffic related pollution in respiratory health. Scientific studies in North America and Europe show that children living in areas with high road traffic volumes have more respiratory-related illness symptoms than other children. More specifically, a significant number of studies conclude that exposure to traffic pollution can aggravate asthma in children (HEI, 2010). Brauer et al. (2002, 2007) found associations by elevated concentrations of NO₂ and diesel soot at children’s homes with increased risk of wheezing in children in the Dutch PIAMA cohort. Symptom associations were also reported in two separate analyses of the GINI and LISA cohort study in Munich (Gehring et al. 2002; Morgenstern et al. 2007), in which dry cough at night had an association with traffic-related pollution in boys at ages 1 and 2 years. In a subsequent study (Morgenstern et al., 2008), children ages 4 and 6 years exhibited associations by distances from a busy street (50 m, 250 m, 1000 m, or > 1000 m) in Munich with symptoms of asthma, hay fever, and eczema. At the nearest (50-m) distance category, the roadway proximity association reached statistical significance for asthma symptoms (OR = 1.24; 95% CI, 1.01–1.52), indicating a 24% increase in asthma symptoms in those children vs. children living more than 1 km away from the roadway.</p>

Code	Issue	Response
13	Health Risk Assessment	<p>The Role of Health Risk Assessment in a National Environmental Policy Act Context</p> <p>The Federal Highway Administration’s National Environmental Policy Act documents are developed under two guiding regulations: the Council on Environmental Quality’s National Environmental Policy Act regulations applicable to all federal agencies (40 Code of Federal Regulations Parts 1500–1508) and the Federal Highway Administration’s implementing regulations governing Federal Highway Administration National Environmental Policy Act documents (23 Code of Federal Regulations Part 771). In its mobile source air toxics guidance, the Federal Highway Administration discusses 40 Code of Federal Regulations Part 1502.22 and acknowledges that while much work has been done to assess the overall health risk of mobile source air toxics, analytical tools and techniques for assessing project-specific health outcomes as a result of lifetime exposures to mobile source air toxics remain limited. These limitations impede the ability to evaluate the potential health risks attributable to exposure to mobile source air toxics as part of the decision-making process in the National Environmental Policy Act context. However, as with any analysis that the Federal Highway Administration conducts for National Environmental Policy Act purposes, the Federal Highway Administration’s approach for mobile source air toxic analysis in National Environmental Policy Act documents is informed not just by 40 Code of Federal Regulations Part 1502.22, but by all applicable Council on Environmental Quality requirements.</p> <p>The appropriateness of air toxics health risk assessment as an analysis method for National Environmental Policy Act documents is discussed below, in the context of Council on Environmental Quality requirements for these documents. In addition to the 40 Code of Federal Regulations Part 1502.22 provisions regarding uncertainty and limitations discussed in the Federal Highway Administration’s MSAT Interim Guidance Appendix C, three other provisions of the Council on Environmental Quality regulations are particularly relevant to the topic of health risk assessment:</p> <p><i>40 Code of Federal Regulations § 1500.1(b): NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA. Most important, NEPA documents must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail.</i></p> <p><i>40 Code of Federal Regulations § 1502.1: An environmental impact statement is more than a disclosure document. It shall be used by Federal officials in conjunction with other relevant material to plan actions and make decisions.</i></p> <p><i>40 Code of Federal Regulations § 1502.2: (a) Environmental impact statements shall be analytic rather than encyclopedic. (b) Impacts shall be discussed in proportion to their significance.(c) Environmental impact statements shall be kept concise and shall be no longer than absolutely necessary to comply with NEPA and with these regulations.</i></p>

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	<p>Venn et al. (2001) investigated the relation between proximity of the family home to the nearest main road, estimated objectively using geographical information system software, and the risk of wheeze in the past year in a case-control sample of 6,147 primary schoolchildren (age 4 to 11 yr.) and a random cross-sectional sample of 3,709 secondary schoolchildren (age 11 to 16 yr.) in Nottingham, United Kingdom. Among children living within 150 m of a main road, the risk of wheeze increased with increasing proximity by an odds ratio (OR) of 1.08 (95% confidence interval [CI] 1.00 to 1.16) per 30-m increment in primary schoolchildren, and 1.16 (1.02 to 1.32) in secondary schoolchildren. Most of the increased risk was localized to within 90 m of the roadside. Among primary schoolchildren, effects were stronger in girls than boys ($p(\text{interaction}) = 0.02$). Living within approximately 90 m of a main road is associated with a roadway proximity-related increase in the risk of wheezing illness in children.</p>  <p>Figure 2. Living Near a Main Road Increases the Risk of Wheezing Illness in Primary (left) and Secondary (right) School Children (Venn et al., 2001)</p> <p>In my own work in the South Bronx, and shown below in Figure 3, I have found that respiratory symptoms (such as cough and wheeze) can double in number per day in children with asthma (vs. a day with low traffic air pollution), as measured by the levels of elemental carbon (EC) soot measured by samplers carried by the children each day.</p>
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Code	Issue	Response
13 (cont.)		<p>Section 1500.1(b) states that information for decision making must be of high quality and based on accurate scientific analysis. Air toxics health risk assessments can involve large uncertainties. The mobile source air toxic health risk assessment uncertainty builds on itself—each step of the analysis involves uncertainties, including modeling traffic and then modeling emissions, and using this estimated output to model dispersion/concentrations, which provide information for estimating or assuming exposures to those concentrations, and finally predicting health outcomes. Major uncertainties are associated with traffic and emissions projections over a 70-year period, and dispersion models are typically held to a “factor of 2” performance standard. Health impacts of mobile source air toxics in the U.S. Environmental Protection Agency Integrated Risk Information System are based on a 70-year lifetime exposure, which introduces significant uncertainty (e.g., on average, people in the United States change residence approximately once every 8 years and change jobs once every 3). Finally, as noted above, the U.S. Environmental Protection Agency’s Integrated Risk Information System provides toxicity (risk) values for various pollutants and routes of exposure; in a health risk assessment, the Federal Highway Administration would compare calculated concentrations of mobile source air toxic pollutants to the Integrated Risk Information System values to estimate health risk. In the Integrated Risk Information System, the U.S. Environmental Protection Agency states the toxicity values are believed to be accurate to within an order of magnitude (a factor of 10). The total cumulative uncertainty involved in highway project health risk assessment is much larger than the change in emissions attributable to projects (typically a few percentage points). In this context, the information would not necessarily have a strong nexus to the requirements for high-quality information and accurate scientific analysis.</p>

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	<div><p>Figure 3. Days with higher traffic air pollution (i.e., higher elemental carbon (EC) soot) is associated with increased asthma symptoms (adapted from Spira-Cohen et al., 2010).</p><p>Overall, the 2010 Health Effects Institute (HEI) Publication 17 found (on page xv.) that: "the Panel concluded that the evidence is sufficient to support a causal relationship between exposure to traffic-related air pollution and exacerbation of asthma." This conclusion from the HEI Publication 17 is also acknowledged in the South Mountain Freeway DEIS (on pg. 4-75), but not sufficiently considered or applied to the proposed project impact assessment.</p><p>I agree with the above HEI Publication 17 conclusion, and I point out that this conclusion is of direct relevance to the proposed South Mountain Freeway, as there are a host of schools, that have children with asthma in them every school day, that would be adversely affected by a worsening of their asthma problems because they are located within a very short distance of the proposed freeway, including the following (distance from center of freeway):</p><ul style="list-style-type: none">• Kyrene de la Estrella, 2620 E. Liberty Lane (0.2 mi.)• Kyrene de los Lagos, 17001 S. 34th Way (0.1 mi.)• Kyrene del Milenio, 4630 E. Frye Road (0.5 mi.)• Kyrene Akimel A-al, 2720 E. Liberty Lane (0.2 mi.)• Desert Vista High School, 16440 S. 32nd St. (0.4 mi.)<p>6</p></div>

Code	Issue	Response
13 (cont.)		<p>Section 1500.1(b) also directs agencies to focus their National Environmental Policy Act analysis and documentation on issues that are truly significant to the action in question. In the context of mobile source air toxics, the Federal Highway Administration must consider whether changes in mobile source air toxic emissions attributable to a project have the potential for significant health risk. Using cancer risk as an example, the U.S. Environmental Protection Agency estimates that the overall risk of cancer in the United States is approximately 330,000 in a million, and that air toxics (from all sources) are responsible for a risk of approximately 50 in a million. In its most recent mobile source air toxics rule-making, the U.S. Environmental Protection Agency estimated mobile source air toxic cancer risk, after implementation of emissions controls, at approximately 5 in a million (or 0.0015 percent of overall cancer risk from any cause). For the Preferred Alternative, the mobile source air toxic emissions analysis for the Study Area found little difference in total annual emissions of mobile source air toxic emissions between the Preferred and No Action Alternatives (less than a 1 percent difference) in 2025 and 2035. With the Preferred Alternative in 2035, modeled mobile source air toxic emissions would decrease by more than 80 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions (see the discussion beginning on page 4-77 of the Final Environmental Impact Statement).</p> <p>In summary, available information from the U.S. Environmental Protection Agency indicates that mobile source air toxics are a small component of overall cancer risk, and the analysis for the Final Environmental Impact Statement indicates both that the Preferred Alternative would result in a small change in the emissions contributing to this risk and that emissions will decline by a large amount regardless of alternative.</p> <p>As described above and in the air quality technical report, results from the health risk assessment would be influenced more by the uncertainty introduced into the process through assumptions and speculations rather than by genuine insight into the actual health impacts directly attributable to mobile source air toxic exposure associated with a project. Therefore, outcomes of such a health risk assessment do not provide useful information for decision makers, as required by Section 1502.1. The Federal Highway Administration emissions analysis meets the requirement to produce information that is useful for both disclosure and decision making because it allows the public and decision makers to see which alternative has less mobile source air toxic emissions, with much less uncertainty than a health risk assessment.</p>

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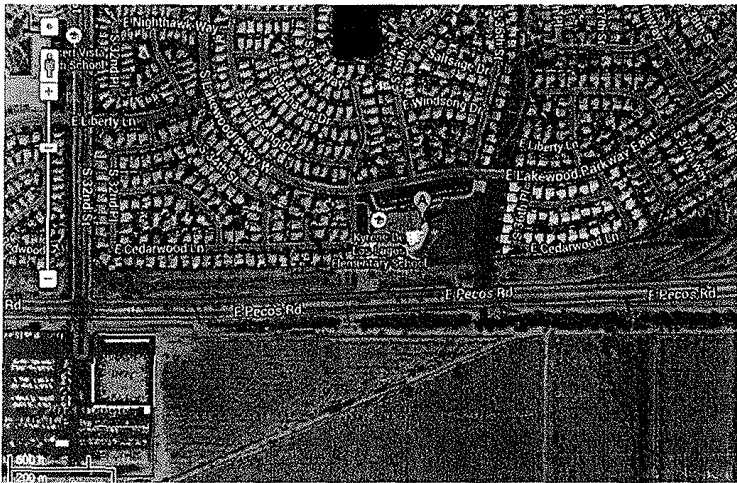
Code	Issue	Response
13 (cont.)		<p>Given the uncertainty of a mobile source air toxic health risk assessment, the Federal Highway Administration instead addresses the potential impacts of mobile source air toxics through an emissions assessment in its National Environmental Policy Act documents. For smaller projects with a lower likelihood of a meaningful impact, this discussion is qualitative. For larger projects, emissions analysis is conducted. The Federal Highway Administration approach is consistent with the Council on Environmental Quality’s direction in Section 1502.2(b) to discuss impacts in proportion to their significance. The results of an emissions analysis can be summarized concisely in a National Environmental Policy Act document and provide useful information for decision makers (e.g., an alternative that has lower emissions is likely to be “better” from a mobile source air toxics health risk standpoint than one that has higher emissions).</p> <p>While the U.S. Environmental Protection Agency and the Federal Highway Administration both agree on the usefulness of addressing mobile source air toxics in National Environmental Policy Act documents for highway projects, the agencies disagree about the value of health risk assessment as a method for doing so.</p>

Code	Comment Document

Code	Issue	Response
13 (cont.)		<p>Another consideration with respect to health impacts is that the Preferred Alternative would also reduce in-vehicle mobile source air toxics exposure as opposed to the No Action Alternative. The U.S. Environmental Protection Agency has found that in-vehicle benzene concentrations were between 2.5 and 40 times higher than nearby ambient concentrations, based on a review of studies discussed in the Regulatory Impact Analysis for the U.S. Environmental Protection Agency’s 2007 mobile source air toxics rule-making (Final Regulatory Impact Analysis, Environmental Protection Agency 420-R-07-002, 3-17 [February 2007]). Construction of the Preferred Alternative would result in a reduction in benzene exposure to drivers and passengers for two reasons: decreased travel times (motorists would spend less time in traffic to reach their destinations) and lower emissions rates (attributable to speed improvements). Reducing on-road exposure would provide a health benefit for motorists using the roadway network. Congestion relief resulting from the proposed freeway would provide localized air quality emissions reductions on area freeways and arterial streets and at interchanges, benefiting users of area highways and those living near congested roads.</p> <p>The Federal Highway Administration determined that a supplemental environmental impact statement is not required at this time because there were no changes to the proposed action that will result in significant environmental impacts not evaluated in the Draft Environmental Impact Statement nor is there new information relevant to environmental concerns and bearings on the proposed action or its impacts that will result in significant environmental impacts not evaluated in the Draft Environmental Impact Statement.</p>

Code	Comment Document
	<ul style="list-style-type: none">• Keystone Montessori, 1025 E. Liberty Lane (0.2 mi.)• Summit School of Ahwatukee, 4515 East Muirwood Drive (0.6 mi.)• Horizon Community Learning Center, 16233 South 48th Street (0.4 mi.)• St. John Bosco Interparish Catholic School, 16035 S 48th St. (0.5 mi.)• Betty Fairfax High School, 8225 S. 59th Ave. (0.1 mi.)• Cheatham Elementary School, 4725 W. South Mountain Avenue (0.4 mi.)• Country Gardens Charter School, 6313 West Southern Ave. (0.5 mi.)• Sunridge Elementary School, 6244 West Roosevelt St. (0.4 mi.)• Western Valley Middle School, 6250 West Durango St. (0.4 mi.)
14	<p>Clearly, the proposed highway will cause new and additional noise and air pollution impacts to many school-age children during the school week, exacerbating their respiratory symptoms, especially for children with asthma, as discussed above, and putting children who do not have asthma at greater risk of getting the disease. Moreover, as shown in Figure 4 below, there are many homes located near these schools, in which many of the students will reside. Thus, these children’s exposure will be even greater, as they will be exposed to much higher traffic air pollution and noise throughout the entire day. Not only will this increase their risk of asthma symptoms, there is now evidence indicating that it can also increase the risk of healthy children contracting asthma.</p>
15	<p>While the HEI Publication 17 Review of the health effects of traffic air pollution concluded that the evidence showing associations between exposure to traffic air pollution and the onset of new asthma in healthy children was only suggestive at that time (i.e. not enough to conclude causality), that report was published in January 2010, before more definitive evidence of this relationship was published. Notably, McConnell et al (2010) later published a study of the relationship of new-onset asthma with traffic-related pollution near homes and schools of children participating in the highly regarded California Children’s Health Study. Physician diagnosis of new-onset asthma ($n = 120$) was identified during 3 years of follow-up of a cohort of 2,497 kindergarten and first-grade children who were asthma- and wheezing-free at study entry into the Southern California Children’s Health Study. The researchers assessed traffic-related pollution exposure based on a line source dispersion model of traffic volume, distance from home and school, and local meteorology. They found that asthma risk increased with modeled traffic-related pollution exposure from roadways near homes [HR 1.51; 95% confidence interval (CI), 1.25–1.82] and near schools (HR 1.45; 95% CI, 1.06–1.98). Thus, these findings more definitively indicate that the risk of new asthma was increased by</p>

Code	Issue	Response
14	Noise, Air Quality	<p>With regard to noise impacts, schools were included in the categories of activities considered in the noise pollution analysis for the project in keeping with 23 Code of Federal Regulations Part 772 (see page 4-80 of the Draft Environmental Impact Statement). As stated in the Draft and Final Environmental Impact Statements, sensitive receivers, including schools, would be affected by implementation of the project. These impacts, however, will be mitigated as discussed beginning on page 4-91 of the Final Environmental Impact Statement. The noise analysis was updated for the Final Environmental Impact Statement (beginning on page 4-88). It is important to note that no substantial differences between the analyses in the Draft and Final Environmental Impact Statements resulted from the update.</p> <p>With regard to the use of chemicals in the context of the project, such use would not likely result in the exposure of children to hazardous materials as children are not expected to be employed in project construction. As detailed in the section of Chapter 4 related to <i>Temporary Construction Impacts</i>, windbreaks, when applicable, will be used to prevent accidental dust pollution. It is anticipated that these precautions will mitigate any potential exposure to dust suppressants (see page 4-173 of the Final Environmental Impact Statement). See Federal Highway Administration’s position on the preparation of a health risk assessment as presented in the last response.</p>
15	Health Effects	<p>A common theme in public comments on the proposed project has been the potential impacts of the project on children’s health, primarily through vehicle emissions and noise. Many commenters raised concerns about the proximity of the project to schools or other aspects of the project that may affect children. In addition, the U.S. Environmental Protection Agency requested that the Final Environmental Impact Statement address Executive Order 13045, <i>Protection of Children from Environmental Health Risks and Safety Risks</i>.</p> <p>Throughout the Final Environmental Impact Statement, potential impacts on and subsequent mitigation for human health are disclosed and identified, as inherent in the environmental impact statement process. The Final Environmental Impact Statement incorporates an assessment of the potential impacts of the proposed project on all populations, including children. The Final Environmental Impact Statement addresses potential impacts of the project on children in the Chapter 4 environmental consequences analyses.</p> <p>The U.S. Environmental Protection Agency’s Toxicity and Exposure Assessments for Children’s Health report (see page 4-73 of the Final Environmental Impact Statement) indicated that indoor air concentrations of benzene are usually higher than outdoor levels and that indoor air in smokers’ homes is a significant contributor to children’s exposures. It mentioned children when identifying the effects of acute exposure to naphthalene. The Final Environmental Impact Statement acknowledges and fully discloses public scoping comments that raised the topic of health effects on neighborhoods and adjacent schools (see page 4-31 of the Final Environmental Impact Statement).</p>

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15	<p>approximately 50% among children exposed to roadway pollution, vs. children who went to school and/or lived further away from the roadways. It is now clear that living and/or going to school near a major roadway is a significant risk to healthy children of developing asthma.</p>  <p>Figure 4. More children, like those attending Kyrene de los Lagos Elementary (shown here), will reside and go to school with much higher traffic noise and air pollution exposures if the proposed South Mountain Freeway is built.</p> <p>In Phoenix, a recent study by Grineski et al (2010) found an association between traffic-related air pollution (as indicated by nitrogen dioxide, NO₂) and increased children’s daily asthma hospital admissions in that city. As shown in Figure 1 from this study, NO₂ air pollution is strongly associated with traffic pollution in the Phoenix area, as concentrations consistently peak following the morning and evening rush hours (e.g., 8AM and 8PM). The authors found, similar to other studies, that there was an increased risk of asthma hospitalization on days of high traffic-related NO₂ air pollution, but also that the risk estimates for asthma hospital admissions were 2.25(95% CI: 1.47–3.46) times greater for black children as compared to white children. In addition, the study found that, among all Hispanic children, those without health insurance have 1.9 (95% CI: 1.3-3.0) times greater risk than those with private insurance of being admitted to the hospital for asthma from NO₂ exposure, and the same finding held for Hispanic children without insurance vs. Hispanic children with Medicaid. Thus, traffic related air pollution adversely affects children in the Phoenix area, and most severely those children lacking health insurance.</p>

Code	Issue	Response
15 (cont.)		<p>The Final Environmental Impact Statement evaluates Clean Air Act criteria air pollutant concentrations in Maricopa County and the Phoenix area (see pages 4-75 to 4-77 of the Final Environmental Impact Statement). With regard to air quality impacts, the Final Environmental Impact Statement addresses children’s health impacts within the broader discussion regarding health impacts under the National Ambient Air Quality Standards. Clean Air Act Section 109(b)(1) requires the U.S. Environmental Protection Agency to promulgate primary National Ambient Air Quality Standards at levels that allow an adequate margin of safety and are requisite to protect the public health. As noted by the U.S. Environmental Protection Agency in its 2013 rulemaking for particulate matter, Clean Air Act Section 109’s legislative history demonstrates that the primary standards are “to be set at the maximum permissible ambient air level... which will protect the health of any [sensitive] group of the population” (78 <i>Federal Register</i> 3086 and 3090) (quoting S. Rep. No. 91-1196, 91st Cong., 2 Sess. 10 [1970]) (alterations in original). Accordingly, the Final Environmental Impact Statement National Ambient Air Quality Standards-based evaluation of criteria air pollutants includes a health-based review of sensitive populations, including children, given the National Ambient Air Quality Standards inherent consideration of those factors. Furthermore, the National Ambient Air Quality Standards-based assessment ensures adequate consideration of health-based issues as “[t]he requirement that primary standards provide an adequate margin of safety was intended to address uncertainties associated with inconclusive scientific and technical information ... and to protect against hazards that research has not yet identified” (78 <i>Federal Register</i> 3090).</p> <p>Sensitive receivers for air and noise are already included in the air quality and noise analyses in accordance with State and federal guidance. Both sections, <i>Air Quality</i> and <i>Noise</i>, beginning on Final Environmental Impact Statement pages 4-68 and 4-88, respectively, have addressed requirements under the National Environmental Policy Act. As stated on page 4-89 of the Final Environmental Impact Statement, over 220 sensitive receivers were evaluated at exterior locations from a traffic noise perspective. All of the receivers represent noise-sensitive land uses in proximity to the proposed project, including homes, schools, and parks, and these receivers would have higher noise levels than similar facilities more distant from the proposed action.</p> <p>Each modeled school was reexamined to determine whether noise impacts would result from the proposed freeway and whether appropriate mitigation of these impacts was provided. Of the nine schools modeled in the analysis for the Final Environmental Impact Statement, all were predicted to exceed the Federal Highway Administration noise abatement criteria (see Table 4-40, beginning on page 4-93). Mitigation, in the form of noise walls, was proposed for all schools. After applying this mitigation, all schools except one were mitigated according to the Arizona Department of Transportation noise policy. According to Arizona Department of Transportation policy, noise mitigation should achieve a reduction of 5 to 7 A-weighted decibels and result in a noise level of less than 64 A-weighted decibels for residential and similar areas. These criteria were not reached for one school (receiver 67, Santa Maria Elementary School) because the policy limits wall heights to 20 feet. A wall taller than 20 feet would be required to bring levels at this receiver down to 64 A-weighted decibels. However, a 5-A-weighted decibels reduction would be provided by the 20-foot wall proposed in this area. It is important to note that this receiver would be affected only by the W71 Alternative, which is not the Preferred Alternative.</p>

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15	<div><p>S.E. Griniski et al. / Environmental Research 110 (2010) 178–188</p><p>Figure 5. NO₂ in the Phoenix Area are highest following rush hour periods, documenting the large role of traffic-related pollution in air pollution impacts in the Phoenix Metro area</p><p>• <i>Reduced lung function</i></p><p>Research by Svendsen et al. (2012) has found both long-term and short-term reductions in lung function (i.e., ability to inhale and exhale air) as a result of traffic-related air pollution exposure. For example, investigators examined 5,654 children enrolled in the El Paso, Texas, public school district by questionnaire in 2001. School-level and residence-level exposures to traffic-related air pollutants were estimated using a land use regression model. For 1,529 children with spirometry, residential levels of traffic-related ambient air pollution were associated with a 2.4% decrement in forced vital capacity (95% confidence interval (CI): -4.0, -0.7) after adjustment for demographic, anthropomorphic, and socioeconomic factors and spirometer/technician effects.</p><p>In my own work in the South Bronx, NY, I have found reduced lung function among elementary school children occurs on days of elevated traffic-related EC concentrations (Spira-Cohen et al, 2011). As shown in the plots below, the impact of diesel traffic related EC was larger and more significant than particles in general (PM_{2.5}).</p></div>

Code	Issue	Response
15 (cont.)		<p>The Arizona Department of Transportation noise policy also states that noise abatement shall be considered if “substantial increases” (defined as a 15 A-weighted decibels or greater increase) are predicted. Of the nine schools modeled, substantial increases were predicted at six schools. As discussed above, however, noise walls would reduce noise levels at all schools according to the Arizona Department of Transportation noise policy, with the exception of Santa Maria Elementary School, which would be affected only by the W71 Alternative, which is not the Preferred Alternative. According to the Federal Highway Administration’s 1995 Highway Traffic Noise Analysis and Abatement Policy and Guidance, in most cases, if the exterior area can be protected, the interior will also be protected.</p> <p>Receptor placement met the criteria for selecting modeling locations as specified in 40 Code of Federal Regulations § 93.123(a). The carbon monoxide analysis was updated in the Final Environmental Impact Statement. Although a qualitative analysis of particulate matter (PM₁₀) was presented in the Draft Environmental Impact Statement, a quantitative project-level particulate matter (PM₁₀) hot-spot analysis is included in the Final Environmental Impact Statement. The results of the air quality updates are summarized in the prologue to the Final Environmental Impact Statement (page xiii) and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement. The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones. Through analysis, the Federal Highway Administration has determined that the proposed project would not produce disproportionate impacts on children.</p>

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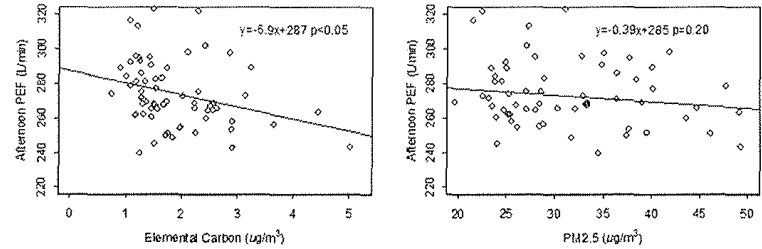


Figure 6. Lung Function in Children Decreases with Increasing Exposure to Traffic Related EC.

• *Reduced Lung Development and Growth*

Traffic-related air pollution has also been indicated to inhibit the growth of young lungs among children over the long-term of exposure. Schultz et al (2012) followed more than 1,900 children in the Swedish birth cohort BAMSE with repeated questionnaires, dynamic spirometry, and IgE measurements until 8 years of age. Outdoor concentrations of particulate matter with an aerodynamic diameter less than 10 µm (PM₁₀) from road traffic were estimated for residential, day care, and school addresses from birth and onward using dispersion modeling. The relationship between time-weighted average exposure during different time windows and FEV at 8 years was analyzed by linear regression, adjusting for potential confounding factors, including short-term exposure to air pollution. The authors found that a 5th to 95th percentile difference in traffic-related average PM₁₀ exposure during the first year of life was associated with a reduced FEV1 of 259.3 ml (95% confidence interval, 211.3 to 25.6) at 8 years of age. Clearly, exposure to traffic-related air pollution reduces the ability for children to properly grow and develop their full lung capacity.

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• *Cardiac effects*

Exposure to air pollution from road traffic has also been linked to a number of other health issues including heart attack, coronary artery disease and increased risk of death from cardiac conditions in adults. For example, Peters et al. (2000) compared patient implanted defibrillator discharge interventions among 100 patients with such devices in eastern Massachusetts, according to variations in concentrations of particulate matter, black carbon, and gaseous air pollutants that were measured daily for the years 1995 through 1997. Patients with ten or more interventions experienced increased arrhythmias in association with nitrogen dioxide, carbon monoxide, black carbon, and fine particle mass. A stronger association was found for NO₂ and black carbon than for PM_{2.5}. Consistent positive associations were observed with black carbon, CO, and NO₂ (noted markers for

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13	<p>local traffic-related pollution), with the strongest associations observed for NO₂. A 26-ppb increase in nitrogen dioxide was associated with nearly a doubling of defibrillator interventions (odds ratio = 1.8; 95% confidence interval = 1.1–2.9). These results indicate that exposure to elevated levels of these traffic-related air pollutants are associated with potentially life-threatening arrhythmias.</p> <p>In January 2010, the HEI Publication 17 Report (HEI, 2010) concluded that the evidence supporting the effects of traffic-related air pollution on cardiac morbidity and mortality were suggestive, but that was also concluded before newer, more definitive evidence was published. In my own work (Lall et al, 2010) in New York City, daily PM_{2.5} speciation measurements collected in Mid-town Manhattan were analyzed via Positive Matrix Factorization source apportionment to determine the original source of different components of air pollution. Daily and distributed-lag Generalized Linear Models of Medicare respiratory and cardiovascular hospital admissions during 2001-2002 considered PM_{2.5} mass and PM_{2.5} from five sources: transported sulfate, residual oil, traffic, steel/construction and soil. Traffic-related PM_{2.5} was significantly associated with an increase in the risk of cardiovascular hospital admissions.</p> <p>Investigations have also found biological markers of cardiac effects by traffic-related air pollution. Hoffmann et al. (2007) conducted a cross-sectional analysis of data collected at baseline for 4,494 residents of Germany followed from 2000 to 2003. The age of participants ranged from 45-74 yrs. of age. The authors estimated 1-yr avg. exposure to PM_{2.5} in 2002 (the midpoint of the baseline exam). They found a 43% (95% CI: -15 to 115) increase in coronary-artery calcification (CAC) per 10 µg/m³ increase in PM_{2.5}. The strength of association was similar across demographic and clinical characteristics subgroups. The authors reported a more consistent association of CAC with traffic exposure (i.e., distance from a major roadway) than with PM_{2.5} mass in general, indicating a stronger role by traffic particles. In a subsequent analysis of these data, Hoffmann et al. (2009) examined the association between Ankle-Brachial Index (ABI, an index of Peripheral Arterial Disease, PAD) and PM_{2.5} in this population. In both studies, residing near a major roadway was the strongest predictor of atherosclerotic disease progression.</p> <p>• <i>Premature mortality</i></p> <p>Premature mortality, especially for cardiac causes, has been widely found to be associated with traffic-related air pollution. In my own research in New York City, We analyzed daily deaths and emergency hospitalizations for CVDs among persons ≥ 40 years of age for associations with PM_{2.5}, its chemical components, nitrogen dioxide (NO₂), carbon monoxide (CO), and sulfur dioxide for the</p>

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13	<p>years 2000-2006 using a Poisson time-series model adjusting for temporal and seasonal trends, temperature effects, and day of the week (Ito et al, 2011). We estimated excess risks per interquartile-range increases at lags 0 through 3 days for warm (April through September) and cold (October through March) seasons. We found that increased CVD mortality and increased CVD hospitalizations were both associated with increased exposure to traffic-related elemental carbon and NO₂ throughout the year in New York City, NY.</p> <p>Similarly, Beckermann et al. (2012) assessed the association between the occurrence of Ischemic Heart Disease (IHD) and air pollutants in Toronto, Ontario, Canada. Confounding was controlled with individual and neighborhood-level covariates. After adjusting for multiple covariates, nitrogen dioxide(NO₂) (a pollutant derived from traffic, as per Figure 5 above) was significantly associated with increased IHD risk, relative risk (RR) = 1.33 (95% confidence interval [CI]: 1.2, 1.47). Subjects living near major roads and highways had a trend toward an elevated risk of IHD, RR = 1.08 (95% CI: 0.99, 1.18).</p> <p>In Phoenix, research by Mar et al (2000) evaluated the association between mortality outcomes in elderly individuals and particulate matter (PM) of varying aerodynamic diameters (in micrometers) [PM₁₀, PM_{2.5}, and PMCF (PM₁₀ minus PM_{2.5})], and selected particulate and gaseous phase pollutants in Phoenix, Arizona, using 3 years of daily data (1995–1997). Although source apportionment and epidemiologic methods have been previously combined to investigate the effects of air pollution on mortality, this was the first study to use detailed PM composition data in a time-series analysis of mortality. These authors found that total and cardiovascular disease mortality was significantly associated with air pollution factors associated with motor vehicle emissions. Total mortality was significantly associated with CO and NO₂ (p < 0.05). Increase cardiovascular mortality was significantly associated with CO, NO₂, SO₂, PM_{2.5}, PM₁₀, PMCF (p < 0.05), and EC soot (related to diesel truck emissions).</p> <p>Thus, the evidence indicating that the risk of cardiac illness and mortality from exposure to traffic-related air pollution has expanded since the HEI Publication 17 report in 2010, and I conclude that adults are at increased risk of cardiac illness and/or mortality from increased exposure to traffic-related air pollution exposure.</p> <p><i>Other Potential Health Effects</i></p> <p>There are a host of other adverse health effects that could result from human exposures to the air pollution emitted by the proposed Freeway that, while less well proven, are also not sufficiently</p>

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	<p>acknowledged by the DEIS. These other potential adverse effects of air pollution exposure from traffic-related air pollution exposure may include increased risk of lung cancer (especially from increased exposure to diesel particulate matter) and adverse birth outcomes (e.g., low birth weight, small for gestational age, and perinatal mortality). In my own research in the largest cohort studied to date, we have found an increased risk of lung cancer to be associated with increased exposure to PM_{2.5} air pollution (Pope et al, 2002). For these outcomes, as noted by the HEI Publication 17, there is presently only “limited evidence of associations, but the data were either inadequate or insufficient to draw firmer conclusions.” While not as well proven as the above effects of exposure to traffic-related air pollution, the risk of lung cancer from traffic air pollution is considered too lightly in the DEIS, and possible adverse birth outcomes are not even discussed in Chapter 4’s “Air Quality” section of the draft DEIS.</p> <p><i>Conclusions</i></p> <p>Based upon my review of the published scientific and medical literature, including my own relevant research, I conclude that the increased exposure to residents living or going to school near to the proposed South Mountain Freeway will be at substantially increased risk of adverse health effects if the freeway is built as proposed, and I further note that these various health impacts are ignored or not sufficiently addressed in the draft DEIS. In particular, if the freeway is built as planned, children with asthma will be at much greater risk of experiencing asthma exacerbations (e.g., asthma attacks, wheezing, cough, etc.). Healthy children will be at significantly higher risk of getting new-onset asthma, and all children living near the proposed Freeway will likely have their lung growth and development inhibited from what it would have been without the Freeway. In adults, the primary health threat from the proposed Freeway air pollution will be increased risks of chronic cardiovascular illness (e.g., PAD), acute myocardial infarctions (MIs), and premature mortality.</p>
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	<p>Ito K, Mathes R, Ross Z, Nádas A, Thurston G, Matte T. (2011). Fine particulate matter constituents associated with cardiovascular hospitalizations and mortality in New York City. <i>Environ Health Perspect.</i> 2011 Apr;119(4):467-73. doi: 10.1289.ehp.1002667.</p> <p>Lall R, Ito K, Thurston G. Distributed Lag Analyses of Daily Hospital Admissions and Source-Appportioned Fine Particle Air Pollution. <i>Environmental Health Perspectives (EHP)</i>. 2011 Apr; 119(4):455-60.</p> <p>Levy JI; Bennett DH; Melly SJ; Spengler JD (2003). Influence of traffic patterns on particulate matter and polycyclic aromatic hydrocarbon concentrations in Roxbury, Massachusetts. <i>J Expo Sci Environ Epidemiol</i>, 13: 364-371.</p> <p>Mar TF, Norris GA, Koenig JQ, Larson TV. Associations between air pollution and mortality in Phoenix, 1995-1997. <i>Environ Health Perspect.</i> 2000 Apr;108(4):347-53.</p> <p>McConnell et al. (2006) Prevalence of asthma in 1,330 children ages 5-7 yr by distance of residence to a major road in longterm residents, no family history of asthma. <i>Environ Health Perspect</i> 2006;114:766–772.</p> <p>McConnell R, Islam T, Shankardass K, Jerrett M, Lurmann F, Gilliland F, Gauderman J, Avol E, Künzli N, Yao L, Peters J, Berhane K. (2010). Childhood incident asthma and traffic-related air pollution at home and school. <i>Environ Health Perspect.</i> 2010 Jul;118(7):1021-6.</p> <p>Morgenstern V, Zutavern A, Cyrys J, Brockow I, Gehring U, Koletzko S, Bauer CP, Reinhardt D, Wichmann HE, Heinrich J. 2007. Respiratory health and individual estimated exposure to traffic-related air pollutants in a cohort of young children. <i>Occup Environ Med</i> 64:8–16.</p> <p>Peters, A.; Liu, E.; Verrier, R. L.; Schwartz, J.; Gold, D. R.; Mittleman, M.; Baliff, J.; Oh, J. A.; Allen, G.; Monahan, K.; Dockery, D. W. (2000) Air pollution and incidence of cardiac arrhythmia. <i>Epidemiology</i> 11: 11-17.</p> <p>Schultz ES, Gruzieva O, Bellander T, Bottai M, Hallberg J, Kull I, Svartengren M, Melén E, Pershagen G. (2012). Traffic-related air pollution and lung function in children at 8 years of age: a birth cohort study. <i>Am J Respir Crit Care Med.</i> 2012 Dec 15;186(12):1286-91. doi: 10.1164/rccm.201206-1045OC. Epub 2012 Oct 26.</p> <p>Reponen T, Grinshpun SA, Trakumas S, Martuzevicius D, Wang ZM, LeMasters G, Lockey JE, Biswas P. 2003. Concentration gradient patterns of aerosol particles near interstate highways in the greater Cincinnati airshed. <i>J Environ Monit</i> 5:557–562.</p> <p>Svendsen ER, Gonzales M, Mukerjee S, Smith L, Ross M, Walsh D, Rhoney S, Andrews G, Ozkaynak H, Neas LM. GIS-modeled indicators of traffic-related air pollutants and adverse pulmonary health among children in El Paso, Texas. <i>Am J Epidemiol.</i> 2012 Oct 1;176 Suppl 7:S131-</p>

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July 2013

Curriculum Vitae

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Education

Degree	Field	Institution
Diploma	Academic	Barrington High School, RI
Sc.B. (Honors)	Environmental Engineering	Brown University
A.B.	Environmental Studies	Brown University
S.M.	Environmental Health Sciences	Harvard Univ. Schl. of Public Health
Sc.D.	Environmental Health Sciences	Harvard Univ. Schl. of Public Health

Postdoctoral Training

Specialty	Mentor	Place of Training
Environ. Epidemiology	Dr. H. Ozkaynak	Harvard Univ., Kennedy Schl. of Gov., Camb., MA

Internships and Residencies N/A

Clinical and Research Fellowships N/A

Licensure and Certification N/A

Academic Appointments

1987-1993	Assistant Professor, Dept. of Environmental Medicine, New York University School of Medicine, New York City, NY.
1993-2006	Associate Professor (Tenured), Dept. of Environmental Medicine, New York University School of Medicine, New York City, NY.
2007-present	Professor (Tenured), Dept. of Environmental Medicine, New York University School of Medicine, New York City, NY.
2007-present	Affiliated Faculty, Environmental Studies Program, College of Arts and Sciences, New York University, New York City, NY.
2012-present	Affiliated Faculty, Marron Institute on Cities and the Urban Environment, New York University, New York City, NY
2012-present	Faculty Mentoring Champion, Dept. of Environmental Medicine, New York University School of Medicine, New York City, NY.

Hospital Appointments: N/A

Other Professional Positions and Visiting Appointments:

Oak Ridge Institute for Science and Education Fellow (2008-2010)

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Major Administrative Responsibilities

Year	Title, Place of Responsibility
1995-2004	Director, Community Outreach and Environmental Education Program, NYU-NIEHS Center of Excellence, Nelson Inst. of Environ. Med., NYU School of Medicine, Tuxedo, NY
2002-2012	Deputy Director, NYU Particulate Matter Research Center, Nelson Inst. of Environmental Medicine, NYU School of Medicine, Tuxedo, NY
2007-2008	Director, Environmental Epidemiology Core, NYU-NIEHS Center of Excellence, Department of Environmental Medicine, Tuxedo, NY
2010-present	Co-Leader, Metals Research Focus Group, NYU-NIEHS Center of Excellence, Department of Environmental Medicine, Tuxedo, NY.
2012-present	Director, Program in Exposure Assessment and Human Health Effects, Department of Environmental Medicine, NYU School of Medicine.
2012-present	Chair, Appointments and Promotions Committee, Department of Environmental Medicine, NYU School of Medicine.

Teaching Experience

Year	Name of course	Type of Teaching/Contact Hrs.
1984-1994	Air Poll. Transport Modeling	(G48.2048) Course Director
2006-present	Weather, Air Pollution, and Health	(G48.1010) Course Director
1986-present	Aerosol Science	(G48.2033) Course Director
1984-2010	Environmental Contamination	(G48.2305) Lecturer
1984-present	Environ. Hygiene Measurements	(G48.2035) Lecturer/Lab
1990-1998	Environmental Toxicology	(G48.1006) Lecturer
1993-1995	Environmental Epidemiology I	(G48.2039) Lecturer
2001-2003	NYU Summer Institute, Wagner School	Lecturer
2006-present	Environmental Epidemiology I	(G48.2039) Lecturer
2006-present	Science, Health & Envir. Journalism	(G54.1017.0) Lecturer
2009-2011	Global Environmental Health	(U10.2153.1) Course Director
2009-2012	Global Issues in Environ. Health	(G48.1011) Course Director
2009-present	Earth Systems Science (undergrad)	(V36.0200) Lecturer
2011-present	Principles of Environmental Health	(G48.1004) Course Director

Awards and Honors

November 1999

Orange Environment Citizens Action Group, OE Award for Excellence in Translating Science to the Public

December 2000

NYU School of Medicine Dean's Research Incentive Award

October 2012

Recipient of the "Haagen Smit Prize" for Best Paper, [Atmospheric Environment](http://geo.arc.nasa.gov/sgg/singh/winners12.html), <http://geo.arc.nasa.gov/sgg/singh/winners12.html>

March 2013

Recipient of the "Top Science Paper of the Year – Science" Award from [ES&T](http://pubs.acs.org/doi/full/10.1021/es400924t), <http://pubs.acs.org/doi/full/10.1021/es400924t>

Major Committee Assignments

New York University Committees

2007-present:

University Sustainability Task Force

2010-2012:

University Faculty Senate Alternate

2012-present:

University Faculty Senator

NYU School of Medicine Departmental Committees

1992-1998:

Sterling Forest Library Committee, Member, NYU SOM Dept of Environ. Medicine

1991-1994

Health & Safety Committee, Member, NYU SOM Dept. of Environ.. Medicine

1992-2004

Community Outreach and Education Comm., Chairman, NYSOM Dept. of Environ. Med.

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1999-2004	Dept. Chairman's Internal Advisory Comm., Member, NYUSOM Dept. of Environ. Med.
2005-present	Dept. Academic Steering Committee, Member, NYUSOM Dept. of Environ. Medicine
2007-2012	Dept. Appointments & Promotions Comm., Member, NYUSOM, Dept. of Environ. Medicine
2012-present	Dept. Appointments & Promotions Comm., Chair, NYUSOM, Dept. of Environ. Medicine
<u>Advisory Committees</u>	
<u>Regional</u>	
1983-1984	Massachusetts Acid Rain Advisory Board, Member, Mass. Dept. of Env. Protection
1984-1986	Committee on Environ. And Occup. Health. , NY State American Lung Association
1991-1996	Air Management Advisory Comm., Member of Health Effects Subcom., NY State DEC
1995-1999	Engineering Advisory Board, Member, Tuxedo, NY
1997-1998	Advisory Committee to the Mayor on the Port of Newburgh, Member, Newburgh, NY
1996-1999	CUES Asthma Working Group, Member, New York Academy of Medicine
2008-2010	New York City Community Air Study (NYCCAS) Advisory Panel
<u>National</u>	
1995-1999	Comm. on Health Effects of Waste Incineration, Member, National Academy of Sciences
1995-1999	National Air Conservation Commission, Member, American Lung Association
2000-2004	National Action Panel on Environment, Member, American Lung Association
2005-present	National Clean Air Committee, Member, American Lung Association
2007-2010	U.S. EPA Clean Air Science Advisory Committee (CASAC) for SOx and NOx
Mar. 2012	EPA Panelist for "Kickoff Workshop to Inform EPA's Review of the Primary NO ₂ NAAQS"
<u>International</u>	
1996-1997	Sulfur in Gasoline Health and Environment Panel, Chairperson, Health Canada
Sept. 2007	Illness Cost of Air Pollution Expert Committee, Canadian Medical Association
2008-2012	Global Burden of Disease (GBD), Committee on the Human Health Effects of Outdoor Air Pollution, World Health Organization (WHO)
<u>Grant Review Committees (National)</u>	
March 1989	EPA Air Chemistry and Physics Extramural Grants Review Panel (<i>ad hoc member</i>)
Oct. 1989	NIEHS P30 Center Special Review Panel (<i>ad hoc member</i>)
July 1992	NIH R01 Epidemiology & Disease Control Study Section (<i>ad hoc member</i>)
Nov. 1992	NIEHS P20 Center Development Grant Special Study Section, (<i>ad hoc member</i>)
June 1996	EPA Special Review Panel of the Health Effects Institute (HEI) (<i>ad hoc member</i>)
March 1997	EPA Office of Res. and Development External Grant Review Panel (<i>ad hoc member</i>)
April 1997	NIEHS Community-Based Participatory Res. R01 Special Study Sect. (<i>ad hoc member</i>)
July 1997	EPA National Environ. Research Lab Intramural Research Review Panel (<i>ad hoc member</i>)
June 1998	EPA Office of Res. and Development External Grant Review Panel (<i>ad hoc member</i>)
July 1998	EPA Climate Policy and Programs Division Grant Application Review (<i>ad hoc member</i>)
Oct. 1998	Mickey Leland Center for Air Toxics Grant Review Panel (<i>ad hoc member</i>)
April 2000	NIEHS P30 Center Special Review Panel (<i>ad hoc member</i>)
July 2001	NIEHS Community-Based Participatory Res. R01 Special Study Sect. (<i>ad hoc member</i>)
Dec. 2001	NIEHS Program Project P01 Site Visit Review Panel (<i>ad hoc member</i>)
April 2003	NIH R21 Fogarty Health, Env. and Economic Development Study Sect. (<i>ad hoc member</i>)
Nov. 2003	U.S. EPA STAR Grant Panel (Epidemiologic Research on Health Effects of Long-Term Exposure to Ambient Particulate Matter and Other Air Pollutants) (<i>member</i>)
October 2004	NIEHS Program Project P01 Review Panel (<i>ad hoc member</i>)
June 2005	NIH Special Emphasis Panel (ZRG1 HOP Q 90 S) (<i>ad hoc member</i>)
Nov. 2005	NIH Infectious Disease, Reproductive Health, Asthma/Allergy, and Pulmonary (IRAP) Conditions Study Section Review Panel (<i>ad hoc member</i>)

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Feb. 2006	NIH Infectious Disease, Reproductive Health, Asthma/Allergy, and Pulmonary (IRAP) Conditions Study Section Review Panel (<i>ad hoc member</i>)
June 2006	NIH Infectious Disease, Reproductive Health, Asthma/Allergy, and Pulmonary (IRAP) Conditions Study Section Review Panel (<i>ad hoc member</i>)
Dec. 2006	NIEHS Special Emphasis Panel on Genetics, Air Pollution, and Respiratory Effects (ZES1 TN-E FG P) (<i>member</i>)
Nov. 2007	NIH Special Emphasis Panel on Community Participation in Research (ZRG1 HOP-S) (<i>member</i>)
June 2009	NIH Study Section Review Panel on Challenge Grants in Health & Science Research
March 2011	U.S. EPA Science to Achieve Results (STAR) Graduate Fellowship Review Panel – Clean Air Panel (<i>chair</i>)
Sept. 2011	NIH Special Epidemiology Study Section (ZRG1 PSE K 02 M) (<i>member</i>)
Oct. 2012	NIH Cardiac and Sleep Epidemiology (CASE) Study Section (<i>ad hoc member</i>)
June 2013	NIH Special NHLBI Dataset Study Section (ZRG1 PSEQ 56) (<i>member</i>)
July 2013	NIH “Cancer Awards” Study Section (ZES1 LWJ-D, K9) (<i>member</i>)
Memberships, Offices, And Committee Assignments In Professional Societies	
<i>Year</i>	<i>Society/Committees</i>
1980-1996	Air and Waste Management Association (Comm. on Health Effects and Exposure.)
1992-Present	American Thoracic Society (ATS): Environmental and Occup. Health (EOH) Assembly, 1995-1999, 2012-present: ATS EOH Long Range Planning Committee; 1993-1994, 2002-2004: ATS Program Committee 2006-2007 Chairman of the ATS-EOH Nominating Committee 2010-present: ATS Environmental Health Policy Committee, member 2012-present: ATS Environmental Health Policy Committee, Vice-Chairman
1990-present	International Society of Exposure Analysis
1992-present	International Society for Environmental Epidemiology (Annual Meeting Program Committee: 1998, 2000, 2003, 2004, 2006) (ISEE Conference Planning Committee: 2006-present)
2007-present	New York Academy of Sciences (membership given in appreciation for a 1/23/07 NYAS forum presentation)
Editorial Positions	
<u>Journal Board Membership</u>	
<i>Year</i>	<i>Name of Board</i>
1993-2008	International Society of Exposure Analysis (J. of Exp. Anal. and Environ. Epid.)
<u>Ad Hoc Manuscript Reviewer</u>	
<i>Years</i>	<i>Journal</i>
1996-1998	American Journal of Epidemiology
1994	Archives of Environmental Health
1995-present	Atmospheric Environment
1995-present	Environmental Health Perspectives
1994-present	Environmental Research
2004-present	Environmental Science and Technology
2011-present	Epidemiology
1993-present	Journal of Exposure Analysis and Environmental Epidemiology
1994-present	Journal of the Air and Waste Management Association
1996-present	Journal of the American Medical Association

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	<div>1997-presentJournal of Occupational and Environmental Medicine</div> <div>1997-presentJournal of Respiratory and Critical Care Medicine</div> <div>2006-presentThorax</div> <div>Scientific Report Reviewer</div> <div>August, 1986Reviewer for the National Academy of Sciences, Board on Environmental Studies and Toxicology report “The Airliner Cabin Environment: Air Quality and Safety”</div> <div>October, 2002Reviewer for the National Academy of Sciences, Board on Environmental Studies and Toxicology report “Estimating the Public Health Benefits of Proposed Air Pollution Regulations”</div> <div>Mentoring of Graduate Students, Residents, Post-Doctoral Fellows in Research</div> <div>Under direct supervision:</div> <div><table><tr><th>Student Name</th><th>Type of Position</th><th>Time Period</th><th>Present Position</th></tr><tr><td>Mark Ostapczuk</td><td>Masters</td><td>1984-1986</td><td>Industrial Hyg., Barr Labs, Pomona, NJ</td></tr><tr><td>Kazuhiko Ito</td><td>Masters/Doctoral</td><td>1984-1990</td><td>Scientist, NYC Dept. of Health, NYC, NY</td></tr><tr><td>Peter Jaques</td><td>Masters/Doctoral</td><td>1988-1998</td><td>Assoc. Prof., Clarkson Univ., Potsdam, NY</td></tr><tr><td>R. Charon Gwynn</td><td>Masters/Doctoral</td><td>1992-1999</td><td>Epidemiologist, Columbia Univ., NY</td></tr><tr><td>Ramona Lall</td><td>Masters/Doctoral</td><td>2000-2007</td><td>Research Sci. IV, NYC Dept. of Health, NY</td></tr><tr><td>Ariel Spira-Cohen</td><td>Masters/Doctoral</td><td>2003-2009</td><td>Research Sci. III, NYC Dept. of Health, NY</td></tr><tr><td>Kevin Cromar</td><td>Masters/Doctoral</td><td>2008-2012</td><td>Assistant Professor, NYU School Of Medicine</td></tr><tr><td>Lital Yinon</td><td>Doctoral</td><td>2011-present</td><td>Doctoral Candidate, NYU School of Medicine</td></tr></table></div> <div>In advisory function (thesis committee):</div> <div><table><tr><th>Student Name</th><th>Advisory Role</th><th>Time Period</th><th>Student’s Supervisor</th></tr><tr><td>Shao-Keng Liang</td><td>Doctoral Committee member</td><td>1990-1994</td><td>Dr. J. Waldman, UMDNJ, Rutgers</td></tr><tr><td>Jerry Formisano</td><td>Doctoral Committee member</td><td>1997-2000</td><td>Dr. M. Lippmann, NYU SOM</td></tr><tr><td>Yair Hazi</td><td>Doctoral Committee member</td><td>1993-2001</td><td>Dr. B. Cohen, NYU SOM</td></tr><tr><td>Samantha Deleon</td><td>Doctoral Committee member</td><td>1997-2003</td><td>Dr. K Ito, NYU SOM</td></tr><tr><td>Chun Yi Wu</td><td>Doctoral Committee member</td><td>2000-2004</td><td>Dr. L.C. Chen, NYU SOM</td></tr><tr><td>Carlos Restrepo</td><td>Doctoral Committee member</td><td>2002-2004</td><td>Dr. R. Zimmerman, Wagner, NYU</td></tr><tr><td>Shaou-I Hsu</td><td>Doctoral Committee member</td><td>2000-2009</td><td>Dr. M. Lippmann, NYU-SOM</td></tr><tr><td>Steven Schauer</td><td>Doctoral Committee member</td><td>2007-2009</td><td>Dr. B. Cohen, NYU-SOM</td></tr><tr><td>Christine Ekenga</td><td>Doctoral Committee Chair</td><td>2009-2011</td><td>Dr. G. Friedman-Jimenez, NYU-SOM</td></tr><tr><td>Rebecca Gluskin</td><td>Doctoral Committee Chair</td><td>2009-2012</td><td>Dr. Kazuhiko Ito, NYU SOM</td></tr><tr><td>Jiang Zhou</td><td>Doctoral Committee Chair</td><td>2008-2012</td><td>Dr. Kazuhiko Ito, NYU SOM</td></tr></table></div> <div>Teaching Awards Received</div> <div>N/A</div> <div>Major Research Interests</div> <div>1) <u>Air Pollution Epidemiology</u>: The study of real-world air pollution exposures and human health effects in the general population and in study cohorts of suspected susceptible individuals (e.g., children, older adults, and those with asthma).</div> <div>2) <u>Aerosol Science</u>: The study of ambient particulate matter aerosol exposures, including designing and implementing air monitoring equipment to collect human exposures to air pollution.</div> <div>3) <u>Environmental Exposure Assessment</u>: The study of methods to assess human exposures and health effects from air pollution, especially the development of source apportionment models to separate human effects on the basis of pollution source, as well as the design of epidemiological</div>	Student Name	Type of Position	Time Period	Present Position	Mark Ostapczuk	Masters	1984-1986	Industrial Hyg., Barr Labs, Pomona, NJ	Kazuhiko Ito	Masters/Doctoral	1984-1990	Scientist, NYC Dept. of Health, NYC, NY	Peter Jaques	Masters/Doctoral	1988-1998	Assoc. Prof., Clarkson Univ., Potsdam, NY	R. Charon Gwynn	Masters/Doctoral	1992-1999	Epidemiologist, Columbia Univ., NY	Ramona Lall	Masters/Doctoral	2000-2007	Research Sci. IV, NYC Dept. of Health, NY	Ariel Spira-Cohen	Masters/Doctoral	2003-2009	Research Sci. III, NYC Dept. of Health, NY	Kevin Cromar	Masters/Doctoral	2008-2012	Assistant Professor, NYU School Of Medicine	Lital Yinon	Doctoral	2011-present	Doctoral Candidate, NYU School of Medicine	Student Name	Advisory Role	Time Period	Student’s Supervisor	Shao-Keng Liang	Doctoral Committee member	1990-1994	Dr. J. Waldman, UMDNJ, Rutgers	Jerry Formisano	Doctoral Committee member	1997-2000	Dr. M. Lippmann, NYU SOM	Yair Hazi	Doctoral Committee member	1993-2001	Dr. B. Cohen, NYU SOM	Samantha Deleon	Doctoral Committee member	1997-2003	Dr. K Ito, NYU SOM	Chun Yi Wu	Doctoral Committee member	2000-2004	Dr. L.C. Chen, NYU SOM	Carlos Restrepo	Doctoral Committee member	2002-2004	Dr. R. 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	<p>models and methods that better incorporate potential confounders/effect modifiers in the air pollution-health link, such as weather and genetic influences on health.</p>
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Code	Comment Document					
Grants Received						
Prior:						
Agency	Title	Grant #	Period	Total Direct Costs	Role	% Effort
USEPA	Effects of Acute Exposure to Summertime Haze Episodes on the Health of Humans	R811563	05/01/84-09/30/87	\$538,586	CO-I	50%
NIH	Acid Aerosol Exposure: Effect on Respiratory Morbidity	R01 ES04612	09/25/87-08/31/92	\$846,966	PI	30%
USEPA	Acid Aerosol Chamber Experiments	OD2524AEX	7/2/90-7/31/9	\$5,810	PI	9%
USEPA	Analysis of Acid Aerosol Experiments	00422248NAEX	8/1/90-9/30/9	\$3,364	PI	5%
USEPA	Air Pollutants and Human Health	R814023	05/18/87-05/17/91	\$690,921	CO-I	50%
USEPA	Development and Field Applic. of an Automated Sequential Weekly Average H+ Sampler	Subcontract to EPA Grant CR816740-03	6/1/92-2/28/9	\$13,156.	PI	15%
NIH	Acid Aerosol Exposure: Effect on Respiratory Morbidity	R01 ES04612	09/01/92-08/31/95	\$377,298.	PI	30%
HEI	Retrospective Characterization of Ozone Exposures	Health Effects Institute Grant	11/1/93-10/31/94	\$98,238	CO-I	10%
NIH	Temperature and Air Pollution Effects on Human Mortality	R01 ES05711	6/1/92-5/31/9	\$371,993	PI	30%
NYUSOM	Environmental Effects on Human Mortality and Morbidity	Bridge Grant	9/1/95-8/31/9	\$48,400	PI	-
USEPA	Effects of Exposure to Ambient Air Pollutants on Human Health	R808325	10/1/91-09/30/96	\$870,565	CO-I	50%
USEPA	Investigation of Acid Aerosol Exposures in Metropolitan Settings	Subcontract to Grant No. CR822050	11/1/93-10/31/96	\$200,499	PI	10%
USEPA	An Evaluation of Potential Confounders in PM10 Mortality Associations	R825271	11/25/96-11/24/01	\$219,410	CO-I	10%
USEPA	Acidic PM and Daily Human Mortality in Three U.S. Cities	#R825264	11/25/96-11/24/00	\$232,671	PI	15%
NYS-ERDA	Environmental Monitoring, Evaluation, and Protection Program	6084-ERTER-ES00	12/01/99-11/30/02	\$341,926	PI	20%
HEI	Children's Asthma Incidence and Personal Exposures to Diesel Particles and Traffic in NYC		01/01/02-12/31/02	\$154,800	PI	30%
USEPA	Influence of Alternate Indicator of Exposure to PM and PM Components in Statistical Associations with Mortality and Hospital Admissions	R827358	03/01/99-02/28/03	\$183,089	PI	30%
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NIH	NIHES Center Supplement: Health Issues Related to the World Trade Center Disaster, Outreach Project	ES00260-S1	04/01/02-03/31/03	Total=\$ 936,487 Outreach=\$172,031	CO-PI PI	10% 15%
NIH	Effects of Ambient Air Pollutants on Annual Mortality	RO1 ES09560	9/15/99-8/31/03	\$471,408	PI	30%
USEPA	Particle Exposures of High-Risk Sub Populations	R827164	10/01/98-09/30/03	\$1,327,240	CO-I	10%
USEPA	A Source Oriented Evaluation of the Combined Effects of Fine Particles and Co-pollutants	R827997	02/01/00-01/31/04	\$291,407	CO-I	15%
NIH	NIHES Center Grant: Outreach and Education Program	ES00260	04/01/00-03/31/05	Total=\$5,000,000 Outreach=\$240,365	CO-I PI	5% 5%
USEPA	EPA PM Health Effects Center Project 6: "A Prospective Study of Asthma Susceptibility to PM Epidemiologic Investigations of Key PM Components and Biomarkers of Effects & Community Outreach Project	R827351	06/01/99-05/31/05	Total=\$6,000,000 Project 6=\$134,923 Outreach=\$77,779	CO-PI PI PI	15% 10% 10%
NIH	Genetic/Epigenetic Susceptibility to Superfund Chemicals: Outreach Project	ES010344	05/08/00-03/31/06	\$156,812	CO-I	5%
USEPA	Env. Issues in the South Bronx. Thurston Project: S. Bronx Backpack Study	X1982152	08/01/00-09/30/06	Total=\$921,922 Project=\$307,131	CO-I PI	5% 15%
NIH	NIHES Center Supplement: Health Issues Related to the World Trade Center Disaster, Source Attribution (Project 4) & Community Outreach	ES00260-S2	04/01/02-03/31/04	Total=\$660,000 Project 4=\$69,999 Outreach=\$172,03	Co-PI PI PI	10% 10% 15%
USEPA	The role of traffic-related pollution in PM health effects associations among inner-city children with asthma	16511	09/01/06-08/31/09	\$51,516	PI	-
California Air Resources Board (CARB)	Spatio-temporal Analysis of Air Pollution and Mortality in California Based Upon the ACS Cohort (Thurston: Consulting Project)		06/01/07-5/31/10	Project=\$13,634	Co-I	4%
USEPA	Real time modeling of weather, air pollution, health outcome indicators in NYC.	RD-83362301-0	12/07-11/10	\$130,496	Co-I	5%
NIH	Fine Particles and Out-of-Hospital Cardiac Arrest in New York City	R01ES014387-01A2	04/09-12/11	\$200,000	CO-I	10%
Health Effects Institute (HEI)	Characteristics of PM Associated with Health Effects. <i>Thurston Project</i> : "Study Of PM Components and U.S. Human Mortality In The ACS Cohort.	4750	01/01/07-3/31/11	Total=\$3,247,567 Project=\$355,920	Co-I PI	5% 20%

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Current:

Agency	Title	Grant #	Period	Total Direct Costs	Role	% Effort
New York State DOT	Mobile Source Air Toxics (MSATs) Mitigation Measures		09/01/10 06/31/13	SubProject=\$89,062	Co-I	10%
Robert Wood Johnson Foundation	The Effect of Peak-Shaving Regulations on the Activity, Toxic Emissions, and Health Impacts of Local Power Plants	Public Health Law Research	1/12-7/13	\$151,500	Co-I	10%
NIH	Long-term Air Pollution Exposure and Mortality in the NIH-AARP Cohort.	R01ES019584-01A1	1/01/12-10/30/15	\$1,070,000	MPI	20%
The Public Health Research Institute of Abu Dhabi	Development of a Public Health Research Institute in Abu Dhabi. <i>Thurston Project: "Air Pollution in Abu Dhabi"</i> .		3/2012-2/2017	\$9,993,960	Co-I	10%
NIH	Dietary Influence on Mortality from Air Pollution Exposure in the NIH-AARP Cohort (R21)	1R21ES021194-01	7/12-6/14	\$150,000	MPI	8%

Patents

None

Boards and Community Organizations

1990-1995

St. Mary's Episcopal Church, Tuxedo, NY, Vestry member

1992-present

Monroe-Woodbury Soccer Club, Coach (Board Member: 1999-2000)

1994-present

Orange County Citizen's Foundation, Member

1999-2009

Y2CARE Monroe-Woodbury, NY School District Residents Action Group, Founder

2005-present

St. Mary's Episcopal Church, Tuxedo, NY, Community Outreach Committee, Member

2006-present

EPISCOBUILD-Newburgh, NY Habitat for Humanity Advisory Board, Member

2012-present

St. Mary's Episcopal Church, Tuxedo, NY, Vestry member

Military Service

None

International Scientific Meetings Organized

May 28-30, 2003

"Workshop on the Source Apportionment of PM Health Effects." U.S. EPA PM Centers, Harriman, NY.

Aug. 1-4, 2004

"Sixteenth Conference of the International Society for Environmental Epidemiology," Kimmel Conference Center, Washington Square, New York University, New York City, NY.

Scientific Forums for the Public Organized

June 2001

"Science and Community Interaction Forum on the Environment." Held at Hostos Community College, Bronx, , New York City, NY.

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October 2001	"Forum on Environmental Health Issues Related to the World Trade Center Disaster." Held at NYU Law School, Washington Square, New York City, NY.
October 2002	"2 nd Annual Forum on the Environmental Health Issues Related to the World Trade Center Disaster." Held at Manhattan Borough Community College, New York City, NY.
October 2003	"3 rd Annual Forum on the Environmental Health Issues Related to the World Trade Center Disaster." Held at NYU Lower Manhattan Campus, New York City, NY.
Invited U.S. House and Senate Congressional Testimony	
Feb. 5, 1997	" <u>Human Health Effects of Ambient Ozone Exposures</u> " Statement before the Committee on Environment and Public Works, Subcommittee On Clean Air, Wetlands, Private Property, And Nuclear Safety, U.S. Senate, Washington, DC. http://epw.senate.gov/105th/thurston.htm
April 16, 1997	" <u>Human Health Effects of Ambient Ozone and Particulate Matter Exposures.</u> " Statement before the Government Reform and Oversight Committee of the U.S. House of Representatives, Washington, D.C.
May 8, 1997	" <u>Human Health Effects of Ambient Ozone and Particulate Matter Exposures.</u> " Statement before the Subcommittee on Health and Environment, Committee on Commerce of U.S. House of Representatives, Washington, D.C.
July 29, 1997,	" <u>The Human Health Effects of Ambient Ozone And Particulate Matter Air Pollution.</u> " Statement before the Subcommittee on Commercial and Administrative Law of the Judiciary Committee of the U.S. House of Representatives, Washington, D.C. http://judiciary.house.gov/legacy/commercial.htm
October 22, 1997	" <u>Ozone and Particulate Matter Air Pollution Health Effects.</u> " Statement before the U.S. Senate Committee on Environment and Public Works Subcommittee on Clean Air, Wetlands, Private Property, and Nuclear Safety. Washington, DC. http://epw.senate.gov/105th/thursto2.htm
July 15, 1999:	" <u>The Mandated Release of Government-Funded Research Data.</u> " Statement before the Committee On Government Reform, Subcommittee on Government Management, Information And Technology, U.S. House of Representatives
July 26, 2001	" <u>The Human Health Effects Of Air Pollution From Utility Power Plants.</u> " Statement before the Committee on Environment and Public Works, U.S. Senate, Washington, D.C. http://www.c-spanvideo.org/program/PlantE
Feb 11, 2002:	" <u>The Air Pollution Effects of The World Trade Center Disaster.</u> " Statement before the Committee On Environment And Public Works, Subcommittee On Clean Air, Wetlands, And Climate Change. United States Senate, New York, NY. http://www.c-spanvideo.org/program/Qualitya
March 5, 2002	" <u>The Use of the Nationwide Registries to Assess Environmental Health Effects.</u> " Statement before the Committee On Health, Education, Labor, And Pensions, Subcommittee On Public Health, U.S. Senate, Washington, DC.
Sept. 3, 2002	" <u>The Clean Air Act and The Human Health Effects of Air Pollution from Utility Power Plants.</u> " Statement before the U.S. Senate Committee on Health, Education, Labor, and Pensions, Subcommittee on Public Health, Washington, D.C. http://www.c-spanvideo.org/program/AirStand
April 1, 2004	" <u>The Human Health Benefits Of Meeting the Ambient Ozone And Particulate Matter Air Quality Standards.</u> " Statement before the Committee on Environment and Public Works, Subcommittee on Clean Air, Climate Change, and Nuclear Safety, U.S. Senate, Washington, D.C.

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April 5, 2002	" <u>Air Pollution Impacts of the WTC Disaster</u> ", 23rd Annual Scientific Conference of the NY/NJ Education and Research Center: "Worker Health and Safety: Lessons Learned in the Aftermath of Sept. 11, 2001," Mt. Sinai School of Medicine, NYC, NY
April 21, 2002	" <u>Adverse Health Effects of Power Plant Air Pollution on Children</u> " Earth Day 2002, 14 th Street Y, New York City, NY.
May 23, 2002	" <u>Human Health Effects of Power Plant Pollution</u> ", Rockland County Conservation Association, Suffern, NY
May 31, 2002	" <u>Environmental Health Impacts of the World Trade Center Disaster</u> ", University of Rochester Medical School, Rochester, NY.
Sept. 19, 2002	" <u>Community Air Pollution Related to the World Trade Center Disaster</u> ". NYC Council Forum: The Environmental Health Consequences of 9/11: Where Do We Stand One Year Later? Borough of Manhattan Community College, New York City, NY.
Oct. 3, 2002	" <u>Community Exposures to Particulate Matter Air Pollution from the World Trade Center Disaster</u> ", Mount Sinai School of Medicine <i>Grand Rounds</i> , New York City, NY.
April 11, 2003	" <u>Environmental Impacts of the World Trade Center Disaster</u> ", NIEHS Public Interest Liaison Group, New York City, NY.
April 21, 2003	" <u>Asthma and Air Pollution</u> ", Airborne Threats to Human Health, NIEHS Town Hall Meeting, Syracuse, NY.
May 7, 2003	" <u>Asthma and Air Pollution in NY City</u> " Environmental Candidate School for New York City Council Candidates, Wagner School, NYU, New York City, NY.
July 21, 2003	" <u>Health Effects of Particulate Matter Air Pollution</u> ", Ozone Transport Commission, Philadelphia, PA.
Nov. 18, 2004	" <u>Ambient Air Pollution Particulate Matter (PM): Sources and Health Impacts</u> ". U.S. Environmental Protection Agency, Region 2, New York City, NY.
Feb. 17, 2005	" <u>Community Air Pollution Aspects Of The Demolition Of 9-11 Contaminated Buildings</u> ". Testimony before the Committee On Lower Manhattan Redevelopment, New York City Council, New York City, NY.
Oct. 19, 2005	<u>Air Pollution Health Effects: Consideration of Mixtures</u> . Fall Meeting of the Mid-Atlantic Chapter of the Society of Toxicology (MASOT), East Brunswick, NJ.
Dec. 7, 2006	<u>Asthma and Air Pollution Effects in the South Bronx</u> . New York City Child Health Forum, The Children's health Fund, Harlem, NYC, NY.
Jan. 18, 2007	Air Pollution Effects in New York City. NYU Environmental Sciences Seminar Lecture, Washington Square, NYC, NY.
Jan. 23, 2007	<u>The South Bronx Backpack Study: Asthma and Air Pollution in NYC</u> . Presented at the forum "High Asthma Rates in the Bronx: What Science Now Knows and Needs to Learn." New York Academy of Sciences, 7 World Trade Center, NYC, NY.
Oct. 2, 2009	"Diesel Air Pollution and Asthma in New York City". Brown Superfund Research Program. http://www.brown.edu/Research/SRP/thurston%20oct%202.pdf , Brown University, Providence, RI.
June 19, 2012	"The Backpack Study of Asthma and Diesel Air Pollution in the South Bronx". Region 1 U.S. EPA, Citizen Science Workshop, New York City, NY.
<u>National Presentations</u>	
Oct. 20, 1987.	NIEHS Symposium on the Health Effects of Acid Aerosols: "Re-examination of London, England, Mortality in Relation to Exposure to Acidic Aerosols During 1963-1972 Winters" RTP, NC.
Aug. 13, 1991	"Kuwait Mortality Risks from SO ₂ and Particles: Insights from the London Fogs" The Kuwait Oil Fires Conf., American Academy of Arts and Sciences, Cambridge, MA.

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Jan. 24, 1994	" <u>Air Pollution Epidemiology: Is the Model the Message?</u> " The First Colloquium on Particulate Air Pollution and Human Morbidity and Mortality". Beckman Center of the NAS, Irvine, CA.
May 23, 1994	" <u>Epidemiological and Field Studies</u> ". American Thoracic Society Annual Meeting, Boston, MA.
May 25, 1994	" <u>Epidemiological Evidence Linking Outdoor Air Pollution and Increased Hospital Admissions for Respiratory Ailments</u> " American Thoracic Society Annual Meeting, Boston, MA.
May 6, 1996	" <u>Associations Between PM₁₀ & Mortality in Multiple US Cities</u> ". Second Colloquium on Particulate Air Pollution and Health. Park City, Utah.
Sept. 5, 1996	" <u>Particulate Matter Exposure Issues for Epidemiology</u> " U.S. EPA Particulate Matter Workshop, RTP, NC
April 3, 1997	" <u>Health Effects of Ambient Ozone & Particulate Matter</u> " Air and Waste Assoc. Regional Conference On Impacts of EPA's Proposed Changes to Ozone and PM Standards, Oak Brook, IL
April 22, 1998	" <u>The New EPA Standards for Ambient PM and Ozone</u> " American Lung Association Annual Meeting, Chicago, IL.
Dec. 21, 1999	" <u>Global Overview of Human Death and Illness due to Air Pollution</u> ". California Air Resources, Sacramento, CA.
March 24, 2000	" <u>Estimating Ancillary Impacts, Benefits and Costs Of Proposed GHG Mitigation Policies For Public Health</u> " Resources for the Future, Wash., DC.
June 24, 2002	" <u>Investigations Into the Environmental Health Impacts Related to the WTC Disaster</u> " Air And Waste Management Annual Meeting, Baltimore, MD.
July 15, 2002	" <u>Air Pollution and Human Health</u> " NIEHS Built Environment Conference, RTP, NC
July 26, 2002	" <u>The Human Health Effects of Power Plant Emissions and Associated Air Pollution</u> ", The Environment & Health Forum, Physicians for Social Responsibility, Washington, DC.
October 7, 2002	" <u>Community Exposures to Particulate Matter Air Pollution from the World Trade Center Disaster</u> " Plenary Speaker at the American Association for Aerosol Research, Charlottesville, North Carolina.
Nov. 11, 2002	" <u>Characterization of Community Exposures to World Trade Center Disaster Airborne and Settled Dust Particulate Matter Air Pollution</u> ", American Public Health Association Annual Meeting, Philadelphia, PA.
Dec. 5, 2002	" <u>Susceptibility of Older Adults to Air Pollution</u> ", EPA Workshop on Differential Susceptibility of Older People to Environmental Hazards, National Academy of Sciences, Washington, DC.
Feb. 3, 2003	" <u>Health Effects of Particulate Matter Air Pollution</u> ", National Air Quality Conference, U.S. EPA, San Antonio, Texas
May 17, 2003	" <u>Assessing the Influence of Particle Sources and Characteristics on Adverse Health Effects of PM</u> ", PG18 - New Tools to Evaluate the Health Effects of Air Pollution in Epidemiologic Studies. American Thoracic Society Annual Meeting, Seattle, WA.
Sep. 10, 2003	" <u>Nature and impact of World Trade Center Disaster fine particulate matter air pollution at a site in Lower Manhattan after September 11.</u> " Annual Meeting of the American Chemical Society, New York, NY.
October 20, 2003	" <u>Translating Air Pollution Risks to the Community</u> " Annual Meeting of the NIEHS Center Directors, Baltimore, MD.
May 18, 2004	" <u>The Health Imperative for Implementation of the Clean Air Act</u> " State and Territorial Air Pollution Program Administrators/ Association of Local Air Pollution Control Officials (STAPPA/ALAPCO) National Conference, Point Clear, Alabama.

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Oct. 18, 2004	<u>"NIEHS Centers' Investigations of the World Trade Center Collapse Pollution Exposures and Effects: A Public Health Collaboration"</u> National Institute of Environmental Health Sciences Center Directors' Meeting, Research Triangle Park, NC.
May 25, 2005	<u>"PM/Sulfate and Coal Combustion Particle Effects: Epidemiologic and Toxicologic Evidence"</u> , American Thoracic Society Annual Meeting, San Diego, CA
Oct. 24, 2005	<u>"The Science Behind the Particulate Matter (PM) Standards"</u> State and Territorial Air Pollution Program Administrators/ Association of Local Air Pollution Control Officials (STAPPA/ALAPCO) National Conference, Alexandria, Virginia.
Oct. 14, 2008	<u>"Diesel Air Pollution and Asthma Exacerbations in a Group of Children with Asthma"</u> Annual Meeting of the International Society for Environmental Epidemiology (ISEE). Pasadena, California.
Feb. 26, 2010	<u>"What studies are appropriate to use to estimate health impacts from specific sources such as diesel PM?"</u> CARB Symposium: <u>"Estimating Premature Deaths from Long-term Exposure to PM_{2.5}"</u> , Sacramento, CA.
May 6, 2011	<u>"Lung Cancer Risks from Exposure to Fine Particle Air Pollution"</u> NYU Cancer Institute Symposium: "Cancer and the Environment", NYC, NY.
May 16, 2012	<u>"The Human Health Effects of Air Pollution"</u> The Air We Breathe: Regional Summit on Asthma and Environment at Allegheny General Hospital, Pittsburgh, PA.
<u>International Presentations</u>	
May 1, 1987	<u>"Acid Aerosols: Their Origins, Occurrence, and Possible Health Effects"</u> , Canadian Environmental Health Directorate Seminar, Health and Welfare Canada, Ottawa, Canada
July 2, 1987	<u>"Health Effects of Air Pollution in the US"</u> , University of Sao Paulo, Sao Paulo, Brasil
Feb. 5, 1991	<u>"Results from the Analysis of Toronto Summer Sulfate and Aerosol and Acidity Data"</u> , Workshop on Current Use and Future Directions of Hospital-Based Data in the Assessment of the Effects of Ambient Air Pollution on Human Health. Health and Welfare Canada, Ottawa, Canada.
April 23, 1997	<u>"An Evaluation of the Role of Acid Aerosols in Particulate Matter Health Effects"</u> , Conference on the Health Effects of Particulate Matter in Ambient Air. Air & Waste Management Association, Prague, Czech Republic.
May 12, 1998	<u>"The Health Effects of PM and Ozone Air Pollution"</u> , Air Pollution: Effects on Ontario's Health and Environment. Ontario Medical Association, Toronto, Canada
Nov. 1, 1999	<u>"Climate Change and the Health Impacts of Air Pollution"</u> . The Public Health Opportunities and Hazards of Global Warming Workshop at the U.N. Framework Convention on Climate Change, Conference of Parties (COP5), Bonn, Germany.
August 31, 2000	<u>"Particulate Matter Air Pollution and Health in three Northeastern Cities"</u> , World Congress on Lung Health, Florence, Italy
January 29, 2001	<u>"PM Exposure Assessment and Epidemiology"</u> , NERAM International Colloquia: Health and Air Quality: Interpreting Science for Decision Makers. Ottawa, Canada.
Feb. 4-5, 2002:	<u>"Air Pollution Exposure Assessment Approaches in U.S. Long-Term Health Studies"</u> , Workshop on Exposure Assessment in Studies on the Chronic Effects of Long-term Exposure to Air Pollution, World Health Organization, Bonn, Germany
May 2, 2002	<u>"Health Effects of Sulfate Air Pollution"</u> Air Pollution as a Climate Forcing Workshop, East-West Center, Honolulu, Hawaii
Sept. 24, 2003	<u>"Identification and Characterization of World Trade Center Disaster Fine Particulate Matter Air Pollution at a Site in Lower Manhattan Following September 11."</u> Annual Meeting of the International Society for Environmental Epidemiology (ISEE). Perth, Australia.
Dec. 1, 2003	<u>"Terrorism and the Pulmonary Effects of the World Trade Center Disaster Particulate Matter Air Pollution"</u> , British Thoracic Society, London, England.

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Sept 14, 2005	<u>"Results And Implications of The Workshop on the Source Apportionment of PM Health Effects"</u> , Annual Meeting of the International Society for Environmental Epidemiology (ISEE). Johannesburg, South Africa.
Sept. 4, 2006	<u>"A Source Apportionment of U.S. Fine Particulate Matter Pollution for Health Effects Analysis"</u> , Annual Meeting of the International Society for Environmental Epidemiology (ISEE). Paris, France.
Sept. 4, 2007	<u>"Applying Attributable Risk Methods to Identify Susceptible Subpopulations"</u> , Annual Meeting of the International Society for Environmental Epidemiology (ISEE). Mexico City, Mexico.
Aug. 27, 2009	<u>"Ischemic Heart Disease Mortality Associations with Long-Term Exposure to PM_{2.5} Components"</u> , Annual Meeting of the International Society for Environmental Epidemiology (ISEE). Dublin, Ireland.
Dec. 1, 2010	"The Hidden Air Quality Health Benefits of Climate Change Mitigation". The Energy and Resources Institute (TERI), Lodhi Road, New Delhi, India.
July 17, 2012	"Recent Findings on the Mechanisms and Health Risks of Particulate Matter Air Pollution", European Centre for Environment & Human Health, Truro, England.
Aug. 29, 2012	"Health Effects of PM Components: NYU NPACT Epidemiology Results and their Integration with Toxicology Results", Annual Meeting of the International Society for Environmental Epidemiology (ISEE). Columbia, SC.
Scientific Meeting Sessions Chaired	
May 1, 1996	<u>"Epidemiological Findings"</u> , 2 nd Colloquium on Particulate Air Pollution & Health. Park City, UT.
May 14, 1996	<u>"Particulate Toxicity"</u> , American Thoracic Society Annual Meeting, New Orleans, LA.
Jan. 30, 1998	<u>"Evaluation of PM Measurement Methods"</u> . PM _{2.5} : A Fine Particulate Standard Specialty Conference. Los Angeles, CA.
August 18, 1998	<u>"Communities and Airports: How to Co-Exist?"</u> , Annual Meeting of the International Society for Environmental Epidemiology (ISEE). Boston, MA.
April 28, 1998	<u>"Clean Air Act Update"</u> , American Thoracic Society Annual Meeting, Chicago, IL.
Oct. 21, 1998	<u>"Health Effects and Regulatory Issues in PM"</u> , Particulate Methodology Workshop. U.S. EPA Center, for Statistics and the Env., Univ. of Washington, Seattle, WA.
April 26, 1999	<u>"Pulmonary Smoking and Air Pollution Epidemiology."</u> American Thoracic Society Annual Meeting, San Diego, CA
Sept. 6, 1999	<u>"Personal exposures to Gases and Particles"</u> , Annual Conference of the International Society for Environmental Epidemiology (ISEE), Athens, Greece.
March 31, 2000	<u>"Epidemiology: Particles, Co-pollutants & Morbidity and Mortality"</u> , Workshop on Inhaled Environmental/Occupational Irritants and Allergens: Mechanisms of Cardiovascular Responses, American Thoracic Society, Scottsdale, AZ
Jan. 26, 2000	<u>"Epidemiology of Particulate Matter Air Pollution"</u> , PM2000 Specialty Conference, Air & Waste Management Assoc., Charleston, SC
May 8, 2000	<u>"Outdoor Air Pollution: Epidemiologic Studies"</u> , American Thoracic Society Annual Meeting, Toronto, Canada
Sept. 5, 2001	<u>"Mortality Epidemiology Studies"</u> , Annual Meeting of the International Society for Environmental Epidemiology (ISEE). Garmisch, Germany.
May 20, 2002	<u>"After September 11: Bio-terrorism and The Environmental Health Aftermath of The World Trade Center Disaster"</u> , Plenary Session. American Thoracic Society Annual Meeting, Atlanta, GA.
April 1, 2003	<u>"Epidemiology: Short-Term and Long-Term Health Effects"</u> , Conference on Particulate Matter: Atmospheric Sciences, Exposure, and the Fourth Colloquium on PM and Human Health, Pittsburgh, PA

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	<p>May 19, 2003 “<u>Particulate Air Pollution and Diseases in Adults</u>”, American Thoracic Society Annual Meeting, Seattle, WA.</p> <p>May 21, 2003 “<u>Air Pollution as a Cause of Childhood Asthma and Chronic Airway Disease</u>”, American Thoracic Society Annual Meeting, Seattle, WA.</p> <p>Sept. 2003 “<u>Unexplained Medical Symptoms</u>”, Annual Meeting of the International Society for Environmental Epidemiology (ISEE). Perth, Australia.</p> <p>Sept. 25, 2005 “<u>Technology and Health</u>”, Annual Meeting of the International Society for Environmental Epidemiology (ISEE). Johannesburg, South Africa.</p> <p>June 22, 2006 “<u>Characteristics of PM and Related Considerations</u>”, Annual Meeting of the Air and Waste Management Association, New Orleans, LA.</p> <p>Sept. 3, 2006 “<u>Air Pollution Mechanisms</u>”, Annual Meeting of the International Society for Environmental Epidemiology (ISEE). Paris, France.</p> <p>Sept. 20, 2006 “Linkage and Analysis of Air Quality and Health Data”, EPA & CDC Symposium on Air Pollution Exposure and Health, RTP, NC</p> <p>Sept. 5, 2007 “<u>Radiation Exposures and Health Risks</u>”, 2007 Annual Meeting of the International Society for Environmental Epidemiology (ISEE). Mexico City, Mexico</p> <p>Aug. 26, 2009 “Exploring the Range of Methodological Approaches Available for Environmental Epidemiology.” 2009 Annual Meeting of the International Society for Environmental Epidemiology (ISEE). Dublin, Ireland</p> <p>March 23, 2010 “Exposure to and Health Effects of Traffic Pollution”, 2010 American Association for Aerosol Research Conference on Air Pollution and Health, San Diego, CA.</p> <p>Sept. 16, 2011 “Susceptibility to Air Pollution”, 2011 Annual Meeting of the International Society for Environmental Epidemiology (ISEE). Barcelona, Spain.</p> <p>Aug. 27, 2012 “Source Apportionment Of Outdoor Air Pollution: Searching For Culprits”. 2012 Annual Meeting of the International Society for Environmental Epidemiology (ISEE). Columbia, SC.</p> <p>Bibliography</p> <p><i>Invited Journal Editorials</i></p> <p>Thurston GD and Bates DM, Air Pollution as an Underappreciated Cause of Asthma Symptoms, 2003. JAMA, 290:14, pp. 1915-1916 (2003).</p> <p>Thurston G.D. (2006). Hospital admissions and fine particulate air pollution. JAMA. Oct 25; 296(16):1966.</p> <p>Thurston G. (2007). Air pollution, human health, climate change and you. Thorax. 2007 Sep; 62 (9): 748-9.</p> <p>Thurston GD, Balmes JR; Particulate matter and the environmental protection agency: setting the right standard. Environmental Health Policy Committee of the American Thoracic Society. Am J Respir Cell Mol Biol. 2012 Dec;47(6):727-8. doi: 10.1165/rcmb.2012-0414ED.</p> <p><i>Book Chapters</i></p> <p>Thurston, G.D. and Leber, M. The relationship between asthma and air pollution. In: <i>Emergency Asthma</i> (ed.: B. Brenner), pp. 127-144. Marcel-Dekker, New York, NY (1999).</p> <p>Thurston, G.D. and Ito, K. Epidemiological studies of ozone exposure effects. In: <i>Air Pollution and Health</i> (ed.: S. Holgate and H. Koren). Academic Press. London. pp. 485-510 (1999).</p> <p>Chen, LC, Thurston, G, and Schlesinger, RB. Acid Aerosols as a Health Hazard. In: <i>Air Pollution and Health</i> (ed.: J. Ayres, R. Maynard, and R. Richards). Air Pollution reviews: Vol. 3. Imperial College Press. London. pp. 111-161 (2006).</p>
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	<p>Thurston, G.D. and Wallace, L. Air Pollution: Outdoor and Indoor Sources. In: <i>Environmental and Occupational Medicine</i>, 4th Edition (Eds.: W. Rom and S. Markowitz). Lippincott, Williams, and Wilkins, Philadelphia (2006).</p> <p>Thurston, G.D. Air Pollution. In: <i>Encyclopedia of Public Health</i> (ed. K. Heggenhougen) Elsevier Press. (2007).</p> <p>Thurston, G.D and Bell, M. Aerosols, global climate, and the human health co-benefits of climate change mitigation. In <i>Aerosol Handbook</i> (2nd edition, in press) (eds.: Lev S. Ruzer and Naomi H. Harley). CRC Press (2012)</p> <p><u>National Academy Committee Books Co-Authored</u></p> <p>National Research Council (NRC), <i>Waste Incineration & Public Health</i>. Committee on Health Effects of Waste Incineration. Board on Environmental Studies and Toxicology. National Academy Press, Washington, DC (2000).</p> <p><u>International Reports Co-Authored</u></p> <p>Health Canada, <i>Health and Environmental Impact Assessment Panel Report</i>, "Joint Industry/Government Study: Sulfur in Gasoline and Diesel Fuels". Ottawa, Canada. (1997).</p> <p>World Health Organization (WHO), <i>Exposure assessment in studies on the chronic effects of long-term exposure to air pollution</i>. Report EUR/03/5039759. Geneva, Switzerland (2003).</p> <p><u>Peer Reviewed Journal Articles/Letters</u></p> <p>Thurston, G.D. General Discussion: Atmospheric dispersion modeling - A critical review. <i>J. Air Pollut. Control Assoc.</i> 29: 939 (1979).</p> <p>Thurston, G.D. Discussion of multivariate analysis of particulate sulfate and other air quality variables by principal components - part I. Annual data from Los Angeles and New York. <i>Atmos. Environ.</i> 15: 424-425 (1981).</p> <p>Thurston, G.D., J.D. Spengler and P.J. Samson. An assessment of the relationship between regional pollution transport and trace elements using wind trajectory analysis. <i>Receptor Models Applied to Contemporary Pollution Problems</i>, Ed. E. Frederick, Air Pollution Control Association, Pittsburgh, PA (1982).</p> <p>Spengler, J.D. and G.D. Thurston. Mass and elemental composition of fine and coarse particles in six U.S. cities. <i>J. Air Poll. Control Assoc.</i> 33: 1162-1171 (1983).</p> <p>Currie, L., R. Gerlach, C. Lewis, W.D. Balfour, J. Cooper, S. Dattner, R. DeCesar, G. Gordon, S. Heisler, P. Hopke, J. Shah and G. Thurston. Inter-laboratory comparison of source apportionment procedures: Results for simulated data sets. <i>Atmos. Environ.</i> 18: 1517-1537 (1984).</p> <p>Thurston, G.D. and J.D. Spengler. A quantitative assessment of source contributions to inhalable particulate matter in metropolitan Boston, Massachusetts. <i>Atmos. Environ.</i> 19: 9-25 (1985).</p> <p>Thurston, G.D. and N.M. Laird. Letters: Tracing aerosol pollution. <i>Science</i> 227: 1406-1407 (1985).</p> <p>Thurston, G.D. and J.D. Spengler. A multivariate assessment of meteorological influences on inhalable particle source impacts. <i>J. Clim. and Appl. Met.</i> 24: 1245-1256 (1985).</p> <p>Ozkaynak, H., J.D. Spengler, A. Garsd and G.D. Thurston. Assessment of population health risks resulting from exposures to airborne particles. <i>Aerosols: Second U.S.-Dutch International Symposium</i>, Lewis Publishing Co., December 1985 (Peer Reviewed).</p> <p>Ozkaynak, H., A.D. Schatz, G.D. Thurston, R.G. Isaacs and R.B. Husar. Relationships between aerosol extinction coefficients derived from airport visual range observations and alternative measures of airborne particle mass. <i>J. Air Pollut. Control Assoc.</i> 35: 1176-1185 (1985).</p> <p>Thurston, G.D. and P.J. Liroy. Receptor modeling and aerosol transport. <i>Atmos. Environ.</i> 21: 687-698 (1987).</p> <p>Ozkaynak, H., and G.D. Thurston. Associations between 1980 U.S. mortality rates and alternative measures of airborne particle concentration. <i>Risk Analysis</i> 7: 449-460 (1987).</p>

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	<p>Lioy, P.J., D. Spektor, G. Thurston, N. Bock, F. Speizer, C. Hayes and M. Lippmann. The design considerations for ozone and acid aerosol exposure and health investigation: The Fairview Lake Summer Camp-Photochemical Smog Case Study. <i>Environ. Int'l.</i> 13: 27-83 (1987).</p> <p>Spektor, D.M., M. Lippmann, P.J. Lioy, G.D. Thurston, K. Citak, D.J. James, N. Bock, F.E. Speizer and C. Hayes. Effects of ambient ozone on respiratory function in active normal children. <i>Am. Rev. Resp. Dis.</i> 137: 313-320 (1988).</p> <p>Lippmann, M. and G.D. Thurston. Exposure Assessment - Input into risk assessment. <i>Arch. Environ. Health</i> 43: 113-123 (1988).</p> <p>Spektor, D.M., M. Lippmann, G.D. Thurston, P.J. Lioy, J. Stecko, G. O'Connor, E. Garshick, F.E. Speizer, and C. Hayes. Effects of ambient ozone on respiratory function in healthy adults exercising outdoors. <i>Am. Rev. Resp. Dis.</i> 138: 821-828 (1988).</p> <p>Ito, K. and G.D. Thurston. Characterization and reconstruction of historical London England acidic aerosol concentrations. <i>Environ. Health Persp.</i> 79: 35-42 (1989).</p> <p>Thurston, G.D., K. Ito, M. Lippmann, and C. Hayes. Re-examination of London mortality in relation to exposure to acidic aerosols during 1962-1973 winters. <i>Environ. Health Persp.</i> 79: 73-82 (1989).</p> <p>Waldman, J.M., P.J. Lioy, G.D. Thurston and M. Lippmann. Spatial and temporal patterns in summertime sulfate aerosol acidity and neutralization within a metropolitan area. <i>Atmos. Environ.</i> 24B: 115-126 (1990).</p> <p>Echalar, E., P. Artaxo and G.D. Thurston. Source apportionment of aerosols in the industrial area of Cubatao, Brazil. In: <i>Aerosols: Science, Industry, Health and Environment</i> (S. Masuda and K. Takahashi, Eds.), pp. 942-945, Pergamon Press (1990).</p> <p>Spektor, D.M., V.A. Hofmeister, P. Artaxo, J. Brague, F. Echalar, D.P. Nogueira, C. Hayes, G.D. Thurston and M. Lippmann. Effects of heavy industrial pollution on respiratory function in the children of Cubatao, Brazil: A preliminary report. <i>Environ. Health Persp.</i> 94: 51-54 (1991).</p> <p>Waldman, J.M., S.K.C. Liang, P.J. Lioy, G.D. Thurston, and M. Lippmann. Measurements of sulfate aerosol and its acidity in the SO₂ source region of Chestnut Ridge, PA. <i>Atmos. Environ.</i> 25A: 1327-1333 (1991).</p> <p>Spektor, D.M., G.D. Thurston, J. Mao, D. He, C. Hayes, and M. Lippmann. Effects of single and multiday ozone exposures on respiratory function in active normal children. <i>Environ. Res.</i> 55: 107-122 (1991).</p> <p>Thurston, G.D. and H. Ozkaynak. Letters: Air pollution and mortality. <i>Science</i> 225: 382-383 (1992).</p> <p>Thurston, G.D., J.F. Gorczynski Jr., P. Jaques, J. Currie and D. He. An automated sequential sampling system for particulate acid aerosols: Description, characterization and field sampling results. <i>J. Exposure Anal. Environ. Epidemiol.</i> 2: 415-428 (1992).</p> <p>Thurston, G.D., K. Ito, P. Kinney and M. Lippmann. A multi-year study of air pollution and respiratory hospital admissions in three New York State metropolitan areas: Results for 1988 and 1989 summers. <i>J. Exposure Anal. and Environ. Epidemiol.</i> 2: 429-450 (1992).</p> <p>Jaques, P.A., G.D. Thurston, P.L. Kinney, and J.E. Gorczynski, Jr. Precision of an ambient sequential acid aerosol sampling system. <i>Appl. Occup. Environ. Hyg.</i> 8: 313-316 (1993).</p> <p>Kinney, P.L. and G.D. Thurston. Field evaluation of instrument performance: Statistical considerations. <i>Appl. Occup. Environ. Hyg.</i> 8: 267-271 (1993).</p> <p>Ito, K., G.D. Thurston, C. Hayes, and M. Lippmann. Associations of London, England daily mortality with particulate matter, sulfur dioxide, and acidic aerosol pollution. <i>Arch. Environ. Health</i> 48: 213-220 (1993).</p> <p>Thurston, G.D., K. Ito, M. Lippmann and D.V. Bates. Respiratory hospital admissions and summertime haze air pollution in Toronto, Ontario: Consideration of the role of acid aerosols. <i>Environ. Res.</i> 65: 271-290 (1994).</p>

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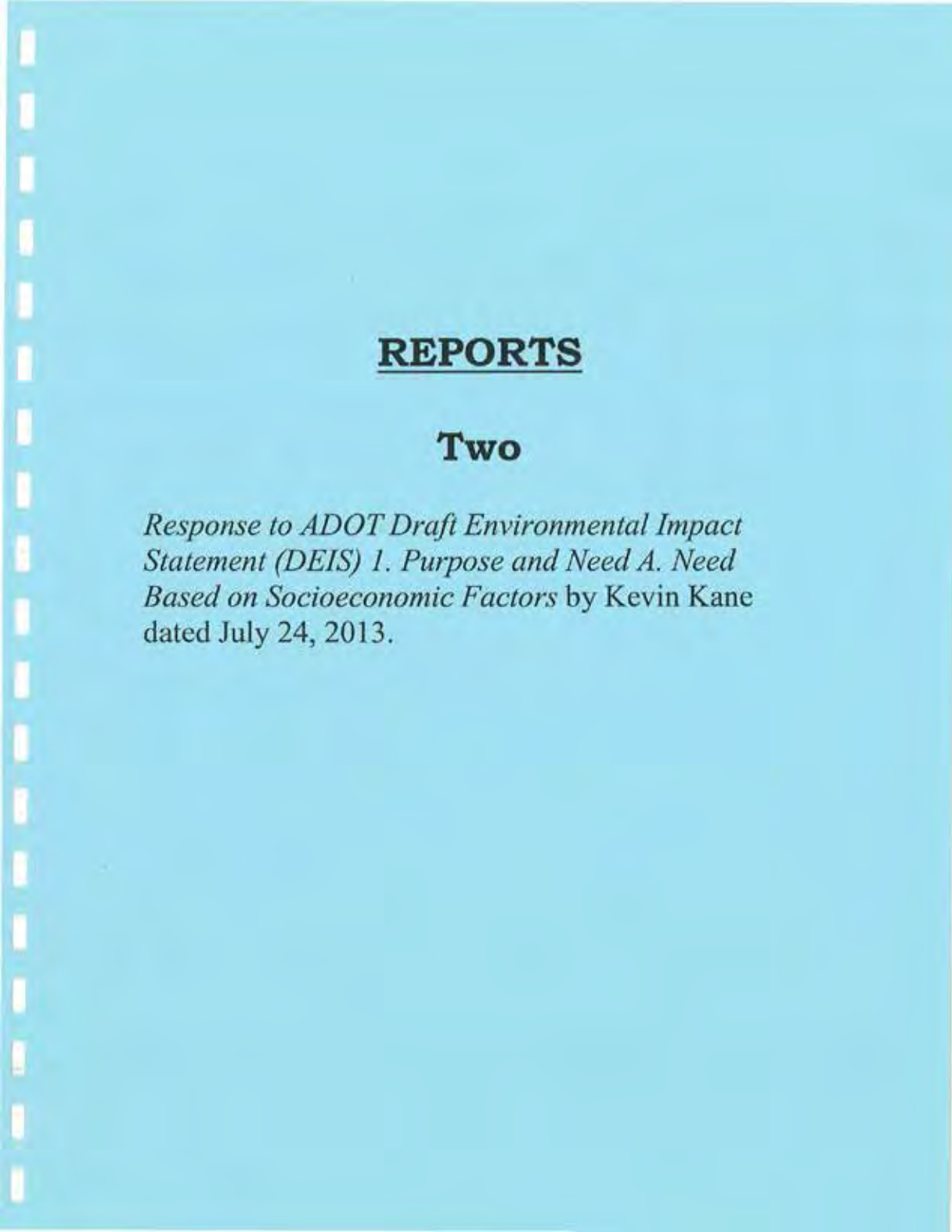
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	<p>RESPONSE TO ADOT DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS) 1. PURPOSE AND NEED A. NEED BASED ON SOCIOECONOMIC FACTORS</p> <p>Comments prepared by Kevin Kane¹ on behalf of PARC, et al. <i>July 24, 2013</i></p> <p><u>Introduction</u></p> <p>The Arizona Department of Transportation (ADOT) justifies the purpose and need for the construction of the South Mountain Freeway in Chapter 1 of the DEIS. Most of the conclusions rely on socioeconomic projections for the year 2035 conducted by the Maricopa Association of Governments (MAG) and the Arizona Department of Economic Security (DES).</p> <p>19 The DEIS justification of the purpose and need for the Loop 202/South Mountain Freeway (“Freeway”) is fatally flawed. This report demonstrates how the use of outdated input data, the extension of short-term trends to long-term growth, and the failure to account for uncertainty in future projections all contribute to the DEIS’ flawed conclusions. If appropriate data, inputs, and interpretation of model results are used, it becomes evident that there is no purpose or need for the freeway based on socioeconomic factors.</p> <p><u>Background: Establishing Need Based on Socioeconomic Factors</u></p> <p>20 The DEIS relies on projections of future population, land use, employment, and housing produced by MAG, with additional Input from the DES. MAG projections are detailed in three reports: an original 2007 report², the documentation to support the projections in this report³, and a 2009 update of the same model extending the projections an additional five years to 2035⁴.</p> <p>The MAG land use model allocates households and employment to locations in Maricopa County as of 2035 using a proprietary model called DRAM/EMPAL. Starting with current population, employment, land use, and an estimated growth rate, the model assigns people and jobs to available locations based on the location’s attractiveness and the expected travel costs. The output is in the form of maps of projected land use at five-year intervals until 2035. The</p> <p>¹ Kevin Kane is a PhD student and instructor at Arizona State University’s School of Geographical Sciences and Urban Planning. His specialties include geographic analysis of city growth and Phoenix residential development patterns during the recession. A Curriculum Vita listing his qualifications can be found as Exhibit 1. ² Maricopa Association of Governments, <i>Socioeconomic Projections of Population, Housing, and Employment by Municipal Planning Area and Regional Analysis Zone</i>. Phoenix, 2007. http://www.azmag.gov/Documents/pdf/cms.resource/MAG_Projections-2007-MPA-and-RAZ-April-2007.pdf ³ Maricopa Association of Governments, <i>Socioeconomic Projections Documentation</i>. Phoenix, 2007. http://www.azmag.gov/Documents/IS_2011-01-18_2007-Socioeconomic-Projections-Docmentation.pdf ⁴ Maricopa Association of Governments, <i>Extension of MAG 2007 Socioeconomic Projections to 2035 for Population, Housing, and Employment by Municipal Planning Area and Regional Analysis Zone</i>. Phoenix, 2009. http://www.azmag.gov/Documents/pdf/cms.resource/MAG_Projections-2007-to-2035-Extension.pdf</p>
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19	Purpose and Need	<p>The Arizona Department of Transportation and Federal Highway Administration used appropriate data, inputs, and model results in assessing whether a purpose and need exist for the proposed action. Data, inputs, and model results were used throughout the environmental impact statement process. The Draft Environmental Impact Statement—particularly in Chapter 1, <i>Purpose and Need</i>, and Chapter 3, <i>Alternatives</i>—explains how the process of establishing a purpose and need for the proposed action followed nationally accepted guidance and policy. Examples of how the purpose and need analyses were applied include:</p> <ul style="list-style-type: none">• the section, <i>Context of the Purpose and Need in the EIS Process</i>, on page 1-1• the sidebar, “A proposed action’s purpose and need documentation should:”, on page 1-1• the sidebar, “How are MAG data used in the DEIS?”, on page 1-4• the sidebar, “What is the MAG regional demand model?”, on page 1-5• the sidebar, “How will the economic downturn affect growth rates?”, on page 1-11• the section, <i>Need Based on Regional Transportation demand and Existing and Projected Transportation System Capacity Deficiencies</i>, beginning on page 1-13• the section, <i>Conclusions</i>, on page 1-21• the section, <i>Reconfirm the Purpose and Need for the Proposed Action</i>, on page 3-1• the section, <i>Responsiveness of the Proposed Freeway to Purpose and Need Criteria</i>, beginning on page 3-27 <p>The models, methods, and assumptions used throughout the Draft Environmental Impact Statement account for reasonably foreseeable future conditions and dismiss speculative considerations. As an example, the Maricopa Association of Governments, as the federally designated regional transportation planning agency, is nationally recognized as a leader in air quality modeling and traffic modeling and forecasting. The models used account for the assumptions made in the comment. The Maricopa Association of Governments model and its application are “state of the practice” exceeding National Environmental Policy Act thresholds relative to sound science.</p> <p>The National Environmental Policy Act recognizes that:</p> <ul style="list-style-type: none">• data and projections can change throughout the process• it is important for the process to account for those changes as they become available• if a reasonable person could conclude that the updated information would lead to substantially different results, the decision-making attributes of the National Environmental Policy Act could be affected
20	Purpose and Need	<p>The analyses in the Draft Environmental Impact Statement used socioeconomic and traffic projections at the regional analysis zone and traffic analysis zone levels. At the time of publication of the Draft Environmental Impact Statement, Census 2010-based socioeconomic data at the regional analysis zone and traffic analysis zone levels had not been adopted by the Maricopa Association of Governments and were not available to the project team. Therefore, the data used in the Draft Environmental Impact Statement were the most appropriate information available.</p>

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20	<p>TransCAD traffic modeling software then uses these maps to estimate travel patterns and traffic volume based on the predicted location of households and businesses in 2035.</p> <p>Socioeconomic modeling is common practice among planning organizations, and it is often statutorily mandated. In fact, the MAG model adds several elements that are not present in earlier DRAM/EMPAL models such as integrating zoning restrictions and municipalities’ land use plans to estimate how to allocate households and employment. However, several major flaws can exist in modeling techniques that often result in inaccurate or misleading projections of future travel need:</p> <ul style="list-style-type: none">- Models are extremely sensitive to input data- Models rely on extending short-term economic trends over long time periods- Models lack confidence intervals – they report only a single projected value, implying a much greater amount of certainty than is actually available <p>In the case of the MAG model and the proposed Freeway extension, these flaws are so significant that they call the purpose and need for the project as established in the DEIS into question.</p> <p><u>Use of Outdated Input Data</u></p> <p>The first page of Chapter 1 of the DEIS states; “At the beginning of the EIS process, the need for a major transportation facility was reexamined to determine whether such a facility is still needed.” However, the DEIS fails to re-evaluate the purpose and need as of its effective date of April 2013, instead relying on projections that were released to the public when the Freeway was proposed in 2004-2005. By ignoring the effects of the real estate collapse and global recession, which had profound effects on Phoenix’s growth, ADOT fails to effectively analyze purpose and need.</p> <p>The original report² relies principally on base year 2005 data to project land use at five year increments until 2030. The updated report⁴ extended these projections to 2035, but used the same data sources. The conclusions in the DEIS are based principally on:</p> <ol style="list-style-type: none">2005 Special Census for population2000 Census housing unit count, updated to 2005 using estimated residential completions2005 employment2005 existing land use coverage <p>The documentation of MAG’s projections also states that, “the model takes into account short-term economic conditions, but not long-range employment trends”⁵. In other words, MAG admits that a shortcoming of the model it uses is the extension of short-range trends to long-range growth. Notwithstanding, MAG not only uses short-range trends to predict long-range growth, it fails to accurately identify short-range trends. 2010 Census data is currently available and should have been included in the DEIS. In Table 1, actual 2010 figures are used to check the accuracy of the projections found in the DEIS:</p> <p>⁵ See Ref. 3, pg. 20</p>

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20 (cont.)		<p>The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future.</p> <p>The Maricopa Association of Governments’ control total for Maricopa County is consistent with the “ADOA—Medium Series” reported in Table 3 of the comment.</p>

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Table 1

TOTAL POPULATION	2005 Actual Population	2010 Projected Population	2005-2010 Projected Annual Growth Rate	2010 Actual Population	2005-2010 Actual Annual Growth Rate
Maricopa County	3,681,025	4,216,499	2.75%	3,817,117	0.73%
Study Area	1,309,001	1,606,100	4.18%	1,422,105	1.67%
Central West	512,836	615,229	3.71%	562,805	1.88%
South Central	82,434	84,976	0.61%	72,331	-2.58%
Southeast	588,349	681,077	2.97%	617,139	0.96%
Southwest Valley	125,382	224,818	12.39%	169,830	6.26%

As indicated in Table 1, MAG estimates of 2005-2010 annual population growth in the County and the Study Area as reflected in the DEIS are *more than double* the actual population growth experienced. Table 2 uses 2010 Census data to compare projected with actual growth in the number of housing units:

Table 2

TOTAL HOUSING UNITS	2005 Actual Units	2010 Projected Units	2005-2010 Projected Annual Growth Rate	2010 Actual Units	2005-2010 Actual Annual Growth Rate
Maricopa County	1,479,767	1,685,134	2.63%	1,639,279	2.07%
Study Area	471,484	589,087	4.55%	478,340	0.29%
Central West	173,619	213,113	4.18%	174,920	0.15%
South Central	33,389	34,134	0.44%	28,909	-2.84%
Southeast	223,968	264,045	3.35%	224,256	0.03%
Southwest Valley	40,508	77,795	13.94%	50,255	4.41%

While the MAG estimates of housing growth in Maricopa County are less overstated than population growth, the Study Area experienced virtually no housing growth over this period. Indeed, independent analysis of Phoenix from 2006-2012 indicates that three Phoenix neighborhoods within the Study Area – Ahwatukee Foothills, Estrella, and Laveen – are in the top five for decrease in residential completions over this period⁶. MAG estimates dramatically overstate growth in the study area and fail to accurately predict short-term growth.

Extension of Short-Term Economic Trends to Long-Range Growth

MAG admits that a shortcoming of the model it uses is the extension of short-range trends to long-range growth. Notwithstanding, MAG not only uses short-range trends to predict long-range growth, it fails to accurately identify short-range trends (as shown in Tables 1 and 2 above). The DEIS includes a lengthy discussion of the historical indicators of growth in Phoenix and a sidebar on page 1-11 that states, “the critical factors underlying these indicators remain unchanged” and further provides that short-term economic conditions are not relevant to long-term planning horizons. This conclusion conveniently omits structural economic changes resulting from the recent real estate collapse and global recession and is internally inconsistent.

⁶ See Exhibit 2. Kane, K., et al., *Residential Development Revisited: Zoning, Neighborhood Effects, and the Recession in Phoenix, Arizona*. Urban Geography, Under Review.

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Although not acknowledged in the DEIS, the Arizona Department of Administration (ADOA) produced population estimates in 2012⁷. ADOA bases its projections on fertility, mortality, and net migration. ADOA projects populations by county for each year until 2050. Unlike the MAG model used in the DEIS, ADOA relies on the most recent available population count (2010 U.S. Census). Furthermore, by considering the fact that future fertility, mortality, and net migration in Maricopa County may vary, ADOA provides a range of possible future population counts by considering multiple possible input values. Thus, their population projections are reported as a Medium Series (the baseline estimate), alongside a Low Series and a High Series in order to reflect this variation.

Table 3 provides a comparison of various methods of projecting population in 2035. The DEIS figures (1) are compared with the various ADOA projections (3-5). In addition, we update the MAG/DEIS projections using actual 2010 census data, but using MAG’s growth rate (2).

Table 3: Maricopa County Population Projections for 2035

2035 Maricopa County Population Projections	
SOURCE	ESTIMATE
(1) MAG	6,545,000
(2) MAG + 2010 US Census	5,925,065
(3) ADOA - Low Series	5,222,906
(4) ADOA - Medium Series	5,776,252
(5) ADOA - High Series	6,232,206
<i>*2010 US Census Actual Population: 3,817,117</i>	

Table 3 indicates that there is a substantial range in possible outcomes when attempting to use short-range trends to predict long-range population growth. The original MAG projections (1) are far in excess of the updated figure using the same growth rate (2), indicating that using outdated input data inflates estimates. Furthermore, the original MAG projections are above all three ADOA estimates, indicating that the DEIS uses a more aggressive growth rate than even the highest growth population scenario predicted by the ADOA.

ADOA figures of county-wide population growth represent an improvement given their use of newer data and providing a range of values, though they do not provide data for population in the Freeway Study Area or include projections of housing units or Vehicle Miles Travelled (VMT). Using Geographic Information System (GIS) software, we are able to demonstrate the impact of using outdated input data on population projections for the Freeway Study Area and its component regions. We again update MAG/DEIS projections using 2010 U.S. Census data in combination with their predicted growth rates. This is done for population (Table 4) and housing units (Table 5).

⁷ See Exhibit 7. Arizona Department of Administration, Office of Employment and Population Statistics, *Arizona State and County Population Projections 2012-2050: Methodology Report*, Phoenix, 7 December 2012. <http://www.workforce.az.gov/population-projections.aspx>

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Table 4: MAG Population Projections, Updated with 2010 U.S. Census Data

TOTAL POPULATION	2010 Projected	2010 Actual	2035 Projected	2010-2035 Projected	2035 Projected-
				Annual Growth Rate	Using 2010 Actual
Maricopa County	4,216,499	3,817,117	6,545,000	1.77%	5,925,065
Study Area	1,606,100	1,422,105	2,577,760	1.91%	2,282,452
Central West	615,229	562,805	809,191	1.10%	740,239
South Central	84,976	72,331	88,589	0.17%	75,406
Southeast	681,077	617,139	871,138	0.99%	789,357
Southwest Valley	224,818	169,830	808,842	5.25%	611,008

Table 5: MAG Housing Unit Projections, Updated with 2010 U.S. Census Data

TOTAL HOUSING UNITS	2010 Projected	2010 Actual	2035 Projected	2010-2035 Projected	2035 Projected-
				Annual Growth Rate	Using 2010 Actual
Maricopa County	1,685,134	1,639,279	2,676,294	1.87%	2,603,468
Study Area	589,087	478,340	983,560	2.07%	798,653
Central West	213,113	174,920	292,760	1.28%	240,293
South Central	34,134	28,909	35,669	0.18%	30,209
Southeast	264,045	224,256	344,570	1.07%	292,647
Southwest Valley	77,795	50,255	310,561	5.69%	200,620

Tables 4 and 5 indicate that long range growth estimates in parts of the Study Area are especially sensitive to input data. For example, even if the dramatic 5.69% annual growth rate in Southwest Valley housing units were to continue, the fact that the actual number of housing units in 2010 was far less than the MAG report projected it would be for that year has a very significant impact on 2035 projections (200,620 versus 310,561).

These updated projections of population growth highlight the problems in extending short-range growth rates to long-term trends. The problem is magnified when short-range growth rates are faulty, as is the case with the projections used in the DEIS. If the information relied upon in the DEIS is unable to accurately predict short-range growth, the same methodology should not be relied upon to justify the purpose and need for major transportation infrastructure based on socioeconomic factors. This is especially true given the tendency to significantly overstate growth in the DEIS.

Uncertainty of Estimates of Population and Vehicle Miles Travelled (VMT)

The final major shortcoming in combined land use – transportation projection is the failure to integrate uncertainty into projections. Municipal projections of population, housing, employment, and vehicle miles travelled rarely include a confidence interval based on generally accepted statistical practices, which is necessary in order for a policymaker to understand the likelihood of particular future scenarios. While some studies allude to the notion there is a variety of potential future outcomes, such as the low, medium and high estimates in the ADOA population projections, the projections contained in the DEIS are presented as certain outcomes.

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Code Issue Response

21	Purpose and Need	The study used state-of-the-practice, scientific community methods and similarly accepted methods, including the use of a standard input-output economic model and of assumptions based on traffic data and projections. The analysis is not required to project ranges, and the results are reasonably foreseeable based on what data are provided from the U.S. Environmental Protection Agency-approved Maricopa Association of Governments model as well as local plans. Further, methods, assumptions, and data were developed early in the environmental impact statement process and peer-reviewed by the Federal Highway Administration, the Arizona Department of Transportation, and other federal, state, and local agencies. Peer reviewers concluded that the methods, assumptions, and data are appropriate. Potential factors that could influence changes in the analysis and study findings are listed on page 4-1 of the Final Environmental Impact Statement.
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Code	Comment Document
21	<p>Basic statistical techniques can provide the policymaker with not only a range of possible values, but also a percentage that expresses the statistical likelihood of each outcome.</p> <p>Furthermore, a common critique of ADOT is that follow-up plans have not been provided for previous highway projects in order to evaluate the accuracy of past projections. A 2006 review of 183 highway projects in major world cities shows a dramatic tendency of agencies to overstate future demand. Half of all projects overstated traffic demand by more than 20%, and one-fourth of all projects overstated traffic demand by more than 40%⁸.</p>
22	<p>The uncertainty of traffic projections for toll roads has also been used by credit ratings agencies which finance projects based on expected toll revenue. A Standard & Poor's review of 104 tollway projects finds substantial "optimism bias" – on average, projects over-projected travel demand in the first five years by more than 20%. The same study analyzed the traffic forecasting used in a confidential sample of these projects, finding that projections of traffic volumes 30 years into the future by different consultants varied by 204% based on modeling techniques and assumptions used⁹.</p>
21	<p>One study empirically modeled the uncertainty stemming from the use of an earlier version of the DRAM/EMPAL land use-transportation model, the same basic model used by MAG. While the outcome of this study is unique to Austin, Texas, researchers ran the model hundreds of times to create simulated confidence intervals and found that, for projections 20 years into the future, errors set around a 70% confidence interval were:</p> <ul style="list-style-type: none">- 38% for peak-period VMT- 50% for residential density- 37% for employment density <p>The projected VMT in Austin, Texas generated by DRAM/EMPAL was 6 million/day, though researchers could only be 70% certain that actual VMT would be between 3.7 million and 8.4 million¹⁰. While the Austin, Texas results are unique to that city, Table 5 compares the manner in which these results were reported to the DEIS 2035 estimates for Maricopa County. Because it is not possible to calculate a confidence interval using available data, the missing values below indicate what such a report would look like. Statistically, it would be possible to say that there is a certain percent (15%, in this example) chance of 2035 VMT being above the upper bound or below the lower bound. Meanwhile, wide range in projections of the Austin, Texas study illustrates that there is a fairly strong probability that future VMT is far greater or far lower than anticipated, including the very real possibility of a decrease in VMT.</p> <p>⁸ See Exhibit 3. Flyvbjerg, B., M.K.S. Holm, and S.L. Buhl, <i>How (in)accurate are demand forecasts in public works projects?</i> Journal of the American Planning Association, 2005. 71(2): p. 131.</p> <p>⁹ See Exhibit 4. Bain, R., <i>Error and optimism bias in toll road traffic forecasts</i>. Transportation, 2009. 36(5): p. 469-482.</p> <p>¹⁰ See Exhibit 5. Krishnamurthy, S. and K.M. Kockelman, <i>Propagation of Uncertainty in Transportation-Land Use Models: An Investigation of DRAM-EMPAL and UTPP Predictions in Austin, Texas</i>. Transportation Research Record, 2003. 1831: p. 219-229.</p>

Code	Issue	Response
22	Alternatives	<p>The Draft Environmental Impact Statement does not consider toll roads as an alternative warranting detailed study in the Draft Environmental Impact Statement and as such, a comparison of performance between toll roads and the proposed action is inappropriate. The study used state-of-the-practice, scientific community methods and similarly accepted methods, including the use of a standard input-output economic model and of assumptions based on traffic data and projections. The analysis is not required to project ranges, and the results are reasonably foreseeable based on what data are provided from the U.S. Environmental Protection Agency-approved Maricopa Association of Governments model as well as local plans. Further, methods, assumptions, and data were developed early in the environmental impact statement process and peer-reviewed by the Federal Highway Administration, the Arizona Department of Transportation, and other federal, state, and local agencies. Peer reviewers concluded that the methods, assumptions, and data are appropriate. Potential factors that could influence changes in the analysis and study findings are listed on page 4-1 of the Final Environmental Impact Statement.</p>

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Table 6

Projected VMT	% Chance Below Lower Bound	Projected Lower Bound	Projected Value	Projected Upper Bound	% Chance Above Upper Bound
Austin, Texas*	15%	3,700,000	6,000,000	8,400,000	15%
Maricopa County**	15%	???	185,000,000	???	15%
Freeway Study Area**	15%	???	42,000,000	???	15%

Source: * Krishnamurthy and Kockelman 2003, **DEIS

By providing only a single value, the DEIS projections are misleading in suggesting that the only possible outcome is a substantial increase in VMT. By failing to provide a confidence interval, the DEIS projections provide only minimal guidance to policymakers about the likelihood of possible future outcomes.

Additionally, DEIS statements indicating that the “factors underlying these indicators” remain unchanged, particularly in the case of VMT, are inaccurate. Recent studies have indicated long-term trends away from driving as a primary means of commuting, citing telecommuting, online shopping, increased fuel prices, and most importantly a generational shift away from vehicle ownership. These changes are not likely to be reflected in MAG modeling, especially trends that have emerged in the last several years since the model was last updated. This would include any number of changes due to the global recession which would almost certainly tend to decrease VMT. An independent report uses US DOT data to show that, despite continual projected increases by planning agencies, VMT per capita has actually decreased by 1.0% per year since 2004¹¹.

These strong national and regional trends would indicate that, assuming arguendo, an increase in population, VMT is more likely to decrease than increase. Decreased VMT per capita combined with the DEIS’ overstated population growth projections means that there is a very high likelihood that future VMT will be well below the projected figures found in the DEIS.

Conclusion

23

In effect, the modeling relied on by the DEIS to justify purpose and need based on socioeconomic factors extends aggressive, pre-recession growth rates decades into the future while ignoring recent data that reflects deep-seated regional and national structural changes that have become apparent in the last several years. MAG’s modeling, which is relied upon in the DEIS to establish the purpose and need for the Freeway expansion fails to accurately identify short-range growth and uses outdated data to estimate long-range growth. It reports its projections in a manner that indicates that they are certain to happen, which is not supported by the data and modeling techniques used. Using accurate data to objectively evaluate purpose and need based on socioeconomic factors supports the no build option.

¹¹ See Exhibit 6. Dutzik, T. and P. Baxandall, *A New Direction: Our Changing Relationship with Driving and the Implications for America's Future*, 2013, U.S. PIRG Education Fund Frontier Group.

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Code	Issue	Response
23	Purpose and Need	<p>The analyses in the Draft Environmental Impact Statement used socioeconomic and traffic projections at the regional analysis zone and traffic analysis zone levels. At the time of publication of the Draft Environmental Impact Statement, Census 2010-based socioeconomic data at the regional analysis zone and traffic analysis zone levels had not been adopted by the Maricopa Association of Governments and were not available to the project team. Therefore, the data used in the Draft Environmental Impact Statement were the most appropriate information available.</p> <p>The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future.</p>

Code	Comment Document
24	<div><div>EXHIBIT 1</div><div><div><div>KEVIN KANE</div><div>Curriculum Vitae</div></div><div><div>CONTACT</div><div>Arizona State University School of Geographical Sciences and Urban Planning Coor Hall, 975 S. Myrtle Ave., 5th Floor Tempe, AZ 85287 Phone: 847.212.0988 Email: kkane5@asu.edu</div></div><div><div>RESEARCH INTERESTS</div><div>Economic development analysis, urban land use change, local government finance, applications of geographical statistics and spatial econometrics</div></div><div><div>EDUCATION</div><div><div><div>Doctor of Philosophy</div><div>Expected 2015</div><div>Geography Arizona State University, Tempe, Arizona Adviser: Breandán Ó hUallacháin</div></div><div><div>Master of Arts</div><div>May 2013</div><div>Geography Arizona State University, Tempe, Arizona Adviser: Breandán Ó hUallacháin</div></div><div><div>Bachelor of Arts</div><div>December 2008</div><div>Environmental Sciences, Economics, Political Science (minor) Northwestern University, Evanston, Illinois Adviser: John C. Hudson</div></div></div><div><div>PROFESSIONAL EXPERIENCE</div><div><div><div>Arizona State University, Teaching Assistant</div><div>August 2011 – Present</div><div><div>- GCU 241: Global Economy in Transition</div><div>- GCU 361: Urban Geography</div><div>- GPH 381: Geography of Natural Resources</div><div>- GPH 210: Society and Environment</div><div>- GCU 495: Quantitative Methods in Geography</div></div></div></div></div><div><div>Current as of May 2013</div><div>Kevin Kane</div><div>Page 1 of 3</div></div></div></div></div>

Code	Issue	Response
24		Résumé

Code	Comment Document
	<p>Arizona State University, Research Associate Summer 2012 – Present School of Human Evolution and Social Change, Phoenix Spatial History Project Funded by LTER. Contributed to urban land use and institutional change projects; quantitative parcel-level analysis, GIS and Econometrics.</p> <p>Thomson Reuters (Chicago), Senior Consultant 2009 – 2011 - Professional Services Division, Complex Property Tax Consulting</p> <p>Centrum Properties (Chicago), Intern May 2007 – August 2007 - Real Estate Development</p> <p><u>PUBLICATIONS – IN PRESS</u></p> <p>York, Abigail, Joseph Tuccillo, Christopher Boone, Bob Bolin, Lauren Gentile, Briar Schoon, and Kevin Kane. In Press. Zoning and Land Use: A Tale of Incompatibility and Environmental Injustice in Early Phoenix. <i>Journal of Urban Affairs</i>.</p> <p><u>PUBLICATIONS – UNDER REVIEW</u></p> <p>Kane, Kevin, Abigail M. York, Joseph Tuccillo, Lauren Gentile, and Yun Ouyang. Residential Development Revisited: Zoning, Local Effects, and the Recession in Phoenix, Arizona.</p> <p>Ó hUallacháin, B. and Kevin Kane. Do Inventors in Less Inventive Regions Substitute Networks for Thin Agglomerative Economies of Scale?</p> <p>Kane, Kevin, Abigail M. York, Joseph Tuccillo, Lauren Gentile, and Yun Ouyang. A Spatio-Temporal View of Historical Growth in Downtown Phoenix, Arizona.</p> <p><u>CONFERENCE PRESENTATIONS</u></p> <p>Kane, Kevin and Rachel Weber. Street Lights or Subsidies? Municipal Investment and Property Tax Appreciation in Chicago's Tax Increment Financing Districts. <i>Meeting of the Association of American Geographers</i>, Los Angeles, California. April 9-13, 2013.</p> <p>Tuccillo, Joseph, Kevin Kane, Yun Ouyang, and Abigail York. Urban Land-Use Institutions and Parcel-Scale Change in Phoenix, Arizona, 1915-2002. <i>Long-Term Ecological Research All Scientists' Meeting</i>. Estes Park, Colorado, September 9-13, 2012. (poster awarded honorable mention at CAP-LTER annual meeting, January 2013)</p> <p>Ó hUallacháin, B. and Kevin Kane. Interregional Dynamics of Emerging Technologies in the United States. <i>Meeting of the Association of American Geographers</i>, New York City, New York. February 23-28, 2012.</p> <p>Current as of May 2013 Kevin Kane Page 2 of 3</p>

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SCHOLARSHIPS AND AWARDS

Central Arizona-Phoenix Long-Term Ecological Research (CAP-LTER) Graduate Research Funding Grant	Spring 2013
CAP-LTER Poster Symposium – Honorable Mention	Spring 2013
Arizona State University, Full Teaching and Research Assistantship	2011-2016
Arizona State University, University Graduate Fellowship	2011-2012
Arizona State University, John F. Lounsbury Travel Fellowship	2011-2012
Northwestern University, Environmental Sciences Departmental Honors	2008-2009
Northwestern University, College of Arts and Science Dean’s List	2007-2008
Boy Scouts of America, Eagle Scout	1998-2005

THESIS

Kane, Kevin. “Validity of Concerns over Urban Sprawl: Social, Economic, and Environmental Impacts.” Undergraduate Thesis, Northwestern University, Environmental Sciences Program, March 2008.

SKILLS

Languages:	English, Conversational French, Basic Polish
Statistical Computing:	SAS, SPSS, R, Stata, Python, LaTeX, Excel
Geospatial Computing:	ArcGIS, GeoDa, pysal, QGIS

PROFESSIONAL AFFILIATIONS

Association of American Geographers	2011 – Present
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Current as of May 2013

Kevin Kane

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25	<div><div>EXHIBIT 2</div><div>RESIDENTIAL DEVELOPMENT REVISITED: ZONING, LOCAL EFFECTS, AND THE RECESSION IN PHOENIX, ARIZONA¹</div><div><div><div>Kevin Kane</div><div>School of Geographical Sciences and Urban Planning</div><div>Arizona State University</div></div><div><div>Abigail M. York</div><div>School of Human Evolution and Social Change</div><div>Arizona State University</div></div><div><div>Joseph Tuccillo</div><div>Department of Geography</div><div>University of Colorado at Boulder</div></div><div><div>Lauren Gentile</div><div>School of Human Evolution and Social Change</div><div>Arizona State University</div></div><div><div>Yun Ouyang</div><div>School of Sustainability</div><div>Arizona State University</div></div></div><div><p><i>Abstract:</i> Where people choose to live and the type of city their decisions create has formed the basis of decades of scholarly endeavor. While the typical notion of a tradeoff between access and space remains important, sprawl, gentrification, polycentricity, land use institutions (zoning), and the composition of the immediately surrounding area (local effects) can all impact residential choice. We propose a logistic regression model to investigate determinants of single-family residential development at the parcel-level in Phoenix, Arizona during the 2002-2006 real estate boom and the 2006-2012 global recession. Results show a preference for cheaper land and agricultural conversion farther from urban subcenters during the boom, while zoning, though relatively inconsistent with actual land use, is an indicator of future development. Development trajectories change dramatically during the bust, disproportionately impacting agricultural conversions and previously fast-growing areas while highlighting the depth of impact that the financial environment has on land use change. [Key words: residential location, land use policy, urban sprawl, recession]</p></div><div><div><div>¹Correspondance concerning this article should be addressed to Kevin Kane, 975 S. Myrtle St., 5th Floor, Tempe, AZ, 85287, USA; telephone: (847) 212-0988; email: kkane5@asu.edu.</div><div>1</div></div></div></div>

Code	Issue	Response
25		Abstract reviewed.

Code Comment Document

26

How (In)accurate Are Demand Forecasts in Public Works Projects?: The Case of Transportation
 Flyvbjerg, Bent; Skamris Holm, Mette K.; Buhl, Søren L.
American Planning Association. Journal of the American Planning Association; Spring 2005; 71, 2;
 ABI/INFORM Complete
 pg. 131

EXHIBIT 3

131

How (In)accurate Are Demand Forecasts in Public Works Projects?

The Case of Transportation

Bent Flyvbjerg, Mette K. Skamris Holm, and Søren L. Buhl

This article presents results from the first statistically significant study of traffic forecasts in transportation infrastructure projects. The sample used is the largest of its kind, covering 210 projects in 14 nations worth U.S.\$59 billion. The study shows with very high statistical significance that forecasters generally do a poor job of estimating the demand for transportation infrastructure projects. For 9 out of 10 rail projects, passenger forecasts are overestimated; the average overestimation is 106%. For half of all road projects, the difference between actual and forecasted traffic is more than $\pm 20\%$. The result is substantial financial risks, which are typically ignored or downplayed by planners and decision makers to the detriment of social and economic welfare. Our data also show that forecasts have not become more accurate over the 30-year period studied, despite claims to the contrary by forecasters. The causes of inaccuracy in forecasts are different for rail and road projects, with political causes playing a larger role for rail than for road. The cure is transparency, accountability, and new forecasting methods. The challenge is to change the governance structures for forecasting and project development. Our article shows how planners may help achieve this.

Bent Flyvbjerg is a professor of planning at Aalborg University, Denmark. He is founder and director of the university's research program on large-scale infrastructure planning. His latest books are *Megaprojects and Risk* (Cambridge University Press, 2003), with Nils Bruzelius and Werner Rothengatter, *Making Social Science Matter* (Cambridge University Press, 2001), and *Rationality and Power* (University of Chicago Press, 1998). Mette K. Skamris Holm is a former assistant professor of planning at Aalborg University. She now works as a planner with Aalborg Municipality. Søren L. Buhl is an associate professor of mathematics at Aalborg University. He is associate statistician with the university's research program on large-scale infrastructure planning.

Journal of the American Planning Association,
 Vol. 71, No. 2, Spring 2005.
 © American Planning Association, Chicago, IL.

Despite the enormous sums of money being spent on transportation infrastructure, surprisingly little systematic knowledge exists about the costs, benefits, and risks involved. The literature lacks statistically valid answers to the central and self-evident question of whether transportation infrastructure projects perform as forecasted. When a project underperforms, this is often explained away as an isolated instance of unfortunate circumstance; it is typically not seen as the particular expression of a general pattern of underperformance in transportation infrastructure projects. Because knowledge is wanting in this area of research, until now it has been impossible to validly refute or confirm whether underperformance is the exception or the rule.

In three previous articles (Flyvbjerg, Holm, et al., 2002, 2003, 2004), we answered the question of project performance as regards costs and cost-related risks. We found that projects do not perform as forecasted in terms of costs: almost 9 out of 10 projects fall victim to significant cost overrun. We also investigated the causes and cures of such inaccurate cost projections (see Flyvbjerg, Bruzelius, et al., 2003). In this article we focus on the benefit side of investments and answer the question of whether projects perform as forecasted in terms of demand and revenue risks. We compare forecasted demand with actual demand for a large number of projects. Knowledge about cost risk, benefit risk, and compound risk is crucial to making informed decisions about projects. This is not to say that costs and benefits are or should be the only basis for deciding whether to build. Clearly, forms of rationality other than economic rationality are at work in most infrastructure projects and are balanced in the broader frame of public decision making. But the costs and benefits of infrastructure projects often run in the hundreds of millions of dollars, with risks correspondingly high. Without knowledge of such risks, decisions are likely to be flawed.

As pointed out by Pickrell (1990) and Richmond (1998), estimates of the financial viability of projects are heavily dependent on the accuracy of traffic demand forecasts. Such forecasts are also the basis for socioeconomic and environmental appraisal of transportation infrastructure projects. According to the experiences gained with the accuracy of demand forecasting in the transportation sector, covering traffic volumes, spatial traffic distribution, and distribution between transportation modes, there is evidence that demand forecasting—like cost forecasting, and despite all scientific progress in modeling—is a major source of

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Code	Issue	Response
26		Article excerpt reviewed.

Code	Comment Document
	<div>EXHIBIT 4</div> <div>Transportation (2009) 36:469–482 DOI 10.1007/s11116-009-9199-7</div> <div>27</div> <div>Error and optimism bias in toll road traffic forecasts</div> <div>Robert Bain</div> <div>Published online: 28 February 2009 © Springer Science+Business Media, LLC. 2009</div> <div>Abstract Traffic forecasts are employed in the toll road sector, inter alia, by private sector investors to gauge the bankability of candidate investment projects. Although much is written in the literature about the theory and practice of traffic forecasting, surprisingly little attention has been paid to the predictive accuracy of traffic forecasting models. This paper addresses that shortcoming by reporting the results from the largest study of toll road forecasting performance ever conducted. The author had access to commercial-in-confidence documentation released to project financiers and, over a 4-year period, compiled a database of predicted and actual traffic usage for over 100 international, privately financed toll road projects. The findings suggest that toll road traffic forecasts are characterised by large errors and considerable optimism bias. As a result, financial engineers need to ensure that transaction structuring remains flexible and retains liquidity such that material departures from traffic expectations can be accommodated.</div> <div>Keywords Toll road · Traffic forecast · Optimism bias · Forecasting error</div> <div>Introduction</div> <div>The global trend for investor-financed toll road concessions brings traffic forecasts—and their predictive accuracy—into sharp relief. All too often, aggressive financial structuring leaves little room for traffic usage to depart from expectations before projects experience distress and debt repayment obligations become threatened. Thus the accuracy of traffic forecasts is of considerable interest to practitioners in the toll road sector yet, until recently, very little was published in the literature about the predictive performance of traffic and revenue forecasting models. That literature is reviewed here.</div> <div>The review starts by examining an early, small-scale study of toll road traffic forecasting accuracy from the USA. Building on and extending this analysis, the majority of the paper is devoted to recent toll road traffic forecasting research conducted by the</div> <div>R. Bain (✉) Institute for Transport Studies, University of Leeds, Leeds LS2 9JT, UK e-mail: info@robbain.com</div> <div>Springer</div>

Code	Issue	Response
27		Article excerpt reviewed.

Code Comment Document

EXHIBIT 5

Propagation of Uncertainty in Transportation-Land Use Models: An Investigation of
DRAM-EMPAL and UTPP Predictions in Austin, Texas

by

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The following paper is a pre-print and the final publication can be found in
Transportation Research Record No. 1831: 219-229, December 2003.
Presented at the 82nd Annual Meeting of the Transportation Research Board,
January 2003

ABSTRACT

This work examines the propagation of uncertainty in outputs of a standard integrated model of transportation and land use. Austin-calibrated DRAM-EMPAL predictions of residence and work locations are used as inputs to a UTPP-type four-step travel demand model (TDM), and the resulting travel times are fed forward into the future period's land use models. Covariance in inputs (including model parameters and demographic variables) was accommodated through multivariate Monte Carlo sampling of 200 scenarios. Variances in land use and travel predictions were then analyzed, over time, and as a function of input values. Results indicate that output variations were most sensitive to the exponent of the link performance function, the split of trips between peak and off-peak and several trip generation & attraction rates. 20 years in the future, final uncertainty levels (as measured by coefficients of variation) due solely to input and parameter estimation errors are on the order of 38% for total regional peak-period VMT, 45% for peak-period flows, and 50% and 37% for residential and employment densities, respectively. This means that central point estimates of key model outputs are very likely (more than 30%) to fall 38% to 50% below or above the mean value. In the Austin example, 15% of the 200 region's simulated peak-period VMT estimates fell below 3.7 million miles (per day) and 15%

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Code	Issue	Response
28		Article excerpt reviewed.

Code	Comment Document
	<p>exceeded 8.4 million miles. Such substantial variation is due solely to standard model parameter and input uncertainties. Other uncertainty about the future and human behavior also exists and will add further variation.</p> <p>Keywords Uncertainty propagation, integrated transportation-land use model, travel demand model</p>
	2

Code	Issue	Response

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29	<div>EXHIBIT 6</div> <div>A New Direction</div> <div>Our Changing Relationship with Driving and the Implications for America’s Future</div> <div>U.S. PIRG Education Fund Frontier Group</div> <div>Tony Dutzik, Frontier Group Phineas Baxandall, U.S. PIRG Education Fund</div> <div>Spring 2013</div>

Code	Issue	Response
29		Article reviewed.

Code	Comment Document
	<div><h2>Acknowledgments</h2><p>U.S. PIRG Education Fund and Frontier Group sincerely thank Nick Donohue and David Goldberg of Transportation for America; Darnell Grisby of the American Public Transportation Association; Todd Litman of the Victoria Transport Policy Institute; Danny Katz of CoPIRG Foundation; Kirstie Pecci of MASSPIRG Education Fund; Adie Tomer of the Brookings Institution; Serena Unrein of Arizona PIRG Education Fund; Clark Williams-Derry of the Sightline Institute, and others for their review of drafts of this document, as well as for their insights and suggestions. Thanks also to Clark Williams-Derry and to Bruce Speight of WISPIRG Foundation for their contributions to this paper. The authors sincerely thank Tom Van Heeke of Frontier Group for his research assistance and Elizabeth Ridlington of Frontier Group for her editorial assistance.</p><p>U.S. PIRG Education Fund and Frontier Group thank the Rockefeller Foundation for making this report possible.</p><p>The authors bear responsibility for any factual errors. The recommendations are those of U.S. PIRG Education Fund. The views expressed in this report are those of the authors and do not necessarily reflect the views of our funders or those who provided review.</p><p>©2013 U.S. PIRG Education Fund. Some Rights Reserved. This work is licensed under a Creative Commons Attribution Non-Commercial No Derivatives 3.0 Unported License. To view the terms of this license, visit creativecommons.org/licenses/by-nc-nd/3.0.</p><p>With public debate around important issues often dominated by special interests pursuing their own narrow agendas, U.S. PIRG Education Fund offers an independent voice that works on behalf of the public interest. U.S. PIRG Education Fund, a 501(c)(3) organization, works to protect consumers and promote good government. We investigate problems, craft solutions, educate the public and offer Americans meaningful opportunities for civic participation. For more information, please visit our website at www.uspirgedfund.org.</p><p>Frontier Group conducts independent research and policy analysis to support a cleaner, healthier and more democratic society. Our mission is to inject accurate information and compelling ideas into public policy debates at the local, state and federal levels. For more information about Frontier Group, please visit www.frontiergroup.org.</p><p>Graphic Design: Harriet Eckstein Graphic Design</p><p>Cover photos (clockwise from top left): <i>Bored driver</i>, Diego Cervo, shutterstock.com; <i>Las Vegas sprawl</i>, Tim Roberts Photography, shutterstock.com; <i>California traffic</i>, Tim McCaig, istockphoto.com; <i>Portland streetcar</i>, Daniel Deitschel, istockphoto.com; <i>Female transit rider</i>, Luis Alvarez, istockphoto.com; <i>Urban bicyclist</i>, Jon Patton, istockphoto.com. Photos are intended for aesthetic purposes only, not to convey editorial content.</p></div>

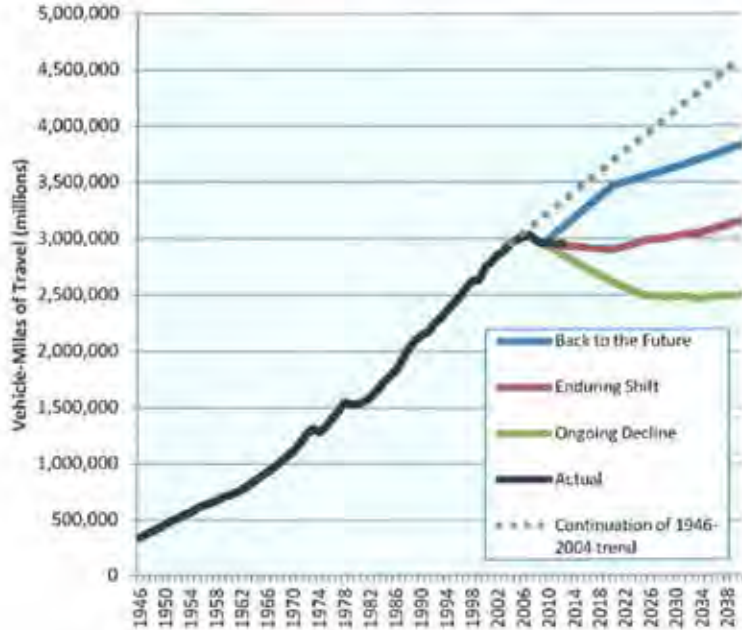
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	<div><div>Executive Summary</div><div><p>The Driving Boom—a six decade-long period of steady increases in per-capita driving in the United States—is over.</p><p>Americans drive fewer total miles today than we did eight years ago, and fewer per person than we did at the end of Bill Clinton’s first term. The unique combination of conditions that fueled the Driving Boom—from cheap gas prices to the rapid expansion of the workforce during the Baby Boom generation—no longer exists. Meanwhile, a new generation—the Millennials—is demanding a new American Dream less dependent on driving.</p><p>Transportation policy in the United States, however, remains stuck in the past. Official forecasts of future vehicle travel continue to assume steady increases in driving, despite the experience of the past decade. Those forecasts are used to justify spending vast sums on new and expanded highways, even as existing roads and bridges are neglected. Elements of a more balanced transportation system—from transit systems to bike lanes—lack crucial investment as powerful interests battle to maintain their piece of a shrinking transportation funding pie.</p><p>The time has come for America to hit the “reset” button on transportation policy—replacing the policy infrastructure of the Driving Boom years with a more efficient, flexible and nimble system that is better able to meet the transportation needs of the 21st century.</p><p>The Driving Boom is over:</p><ul style="list-style-type: none">• Americans drove more miles nearly every year between the end of World War II and 2004. (See Figure ES-1, next page.) By the end of this period of rapid increases in per-capita driving—which we call the “Driving Boom”—the average American was driving 85 percent more miles each year than in 1970.• Americans drive no more miles in total today than we did in 2004 and no more per person than we did in 1996.• On the other hand, Americans took nearly 10 percent more trips via public transportation in 2011 than we did in 2005. The nation also saw increases in commuting by bike and on foot.</div></div> <div>Executive Summary 1</div>

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Figure ES-2. Aggregate Vehicle-Miles Traveled in the United States under Several Scenarios of Future Travel Growth, 1946-2040



- Young people aged 16 to 34 drove 23 percent fewer miles on average in 2009 than they did in 2001—a greater decline in driving than any other age group. The severe economic recession was likely responsible for some of the decline, but not all.
- Millennials are more likely to want to live in urban and walkable neighborhoods and are more open to non-driving forms of transportation than older Americans. They are also the first generation to fully embrace mobile Internet-connected technologies, which are rapidly spawning new transportation options and shifting the way young Americans relate to one another, creating new avenues for living connected, vibrant lives that are less reliant on driving.
- If the Millennial-led decline in per-capita driving continues for another dozen years, even at half the annual rate of the 2001-2009 period (illustrated by the *Ongoing Decline* scenario in Figure ES-2 above), total vehicle travel in the United States could remain well below its 2007 peak through at least 2040—despite a 21 percent increase in population. If

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	<div><p>Millennials retain their current propensity to drive less as they age and future generations follow (<i>Enduring Shift</i>), driving could increase by only 7 percent by 2040. If, unexpectedly, Millennials were to revert to the driving patterns of previous generations (<i>Back to the Future</i>), total driving could grow by as much as 24 percent by 2040.</p><ul style="list-style-type: none">All three of these scenarios yield far less driving than if the Driving Boom had continued past 2004. Driving declines more dramatic than any of these scenarios would result if future per-capita driving were to fall at a<p>rate near that of recent years or if annual per-capita reductions continue through 2040.</p><ul style="list-style-type: none">Regardless of which scenario proves true, the amount of driving in the United States in 2040 is likely to be lower than is assumed in recent government forecasts. This raises the question of whether changing trends in driving are being adequately factored into public policy. (See Figure ES-3.)<p>The recent reduction in driving has already delivered important benefits for</p></div> <div><p>Figure ES-3. Recent Official Forecasts of Vehicle Travel Compared to Range of Scenarios, 1946-2040</p><p>U.S. DOT = U.S. Department of Transportation STIFC = Surface Transportation Infrastructure Financing Commission U.S. EIA = U.S. Energy Information Administration</p></div> <div><p>A New Direction</p></div>

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	<p>the nation, while raising new challenges. Future driving trends will have major implications for transportation policy and other aspects of American life.</p> <ul style="list-style-type: none">• Traffic congestion has fallen. According to data from the Texas Transportation Institute, Americans spent 421 million fewer hours stuck in traffic in 2011 than they did in 2005. Further reductions in driving could lead to additional easing of congestion without massive investments in new highway capacity, as long as roads are maintained in a state of good repair.• America is less dependent on oil. In 2011, gasoline consumption for transportation hit a 10-year low. Further reductions in driving consistent with the <i>Ongoing Decline</i> scenario—coupled with expected vehicle fuel economy improvements—could result in the nation using half as much gasoline or other fuels in our cars and trucks by 2040 as we use today.• Our roads are getting less use ... but the gas tax is bringing in less income. Reduced vehicle travel (particularly in large trucks) reduces the wear and tear on our nation's roads, reducing maintenance needs. Reduced driving, however, also reduces the amount of revenue brought in by the already-strained gasoline tax. <p>The recent reduction in driving and embrace of less auto-dependent ways of living by Millennials and others creates a golden opportunity for America to adopt transportation policies that use resources more efficiently, preserve our existing infrastructure, and provide support for Americans seeking alternatives to car travel.</p> <p>A new vision for transportation policy should:</p> <ul style="list-style-type: none">• Plan for uncertainty. With future driving patterns uncertain, federal, state and local transportation officials should evaluate the costs and benefits of all transportation projects based on several scenarios of future demand for driving. Decision-makers should also prioritize those projects that are most likely to deliver benefits under a range of future circumstances.• Support the Millennials and other Americans in their desire to drive less. Federal, state and local policies should help create the conditions under which Americans can fulfill their desire to drive less. Increasing investments in public transportation, bicycling and pedestrian infrastructure and intercity rail—especially when coupled with regulatory changes to enable the development of walkable neighborhoods—can help provide more Americans with a broader range of transportation options.• Revisit plans for new or expanded highways. Many highway projects currently awaiting funding were initially conceived of decades ago and proposed based on traffic projections made before the recent decline in driving. Local, state and federal governments should revisit the need for these “legacy projects” and ensure that proposals for new or expanded highways are still a priority in light of recent travel trends.• Refocus the federal role. The federal government should adopt a more strategic role in transportation policy, focusing resources on key priorities (such as repair and maintenance of existing infrastructure and the expansion of transportation options) and evaluating projects competitively on the basis of their benefits to society.

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	<ul style="list-style-type: none"> • Use transportation revenue where it makes the most sense. Transportation spending decisions should be based on overall priorities and a rigorous evaluation of project costs and benefits—not on the source of the revenue. • Do our homework. Federal and state governments should invest in research to evaluate the accuracy and usefulness of transportation models and better understand changing transportation trends in the post-Driving Boom era.

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The seal of the State of Arizona is circular. It features a central shield with a landscape scene including a sun, mountains, and a river. Above the shield is a banner with the Latin motto "DITAT DEUS". The outer ring of the seal contains the text "GREAT SEAL OF THE STATE OF ARIZONA" at the top and "1912" at the bottom, flanked by two stars.

EXHIBIT 7

ARIZONA DEPARTMENT OF ADMINISTRATION

Office of Employment and Population Statistics

Arizona State and County Population Projections, 2012-2050: Methodology Report

December 7, 2012

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30		Report reviewed.

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1. BACKGROUND

Arizona State and County Population Projections (2012 edition) are prepared in accordance with Sections 1, 4 and 5 of Executive Order 2011-04 signed by Governor Janice Brewer:

Section 1: The Arizona Department of Administration (ADOA) shall be the agency designated to produce the official population estimates and projections for the State of Arizona.

Section 4: ADOA shall produce the official population projections for each year for a minimum of the next 25-year period. The projections shall be dated as of July 1 and shall include projections for the State, its counties, its incorporated jurisdictions, and the unincorporated balance of each county.

Section 5: ADOA shall release the State and county projections as soon as possible following the release of detailed decennial census data by the U.S. Department of Commerce, Bureau of the Census, but no later than December 31 in years ending in 2. These projections shall be updated twice at three year intervals, prior to the release of the next decennial census data and no later than December 31 in the years ending in 5 and 8.

Executive Order 2011-04 also directs the use of these projections:

Section 10: Population estimates and projections produced by ADOA in accordance with this Executive Order shall be used by all State agencies for all purposes, including those required by federal law, which necessitates the development of population estimates or population projections.

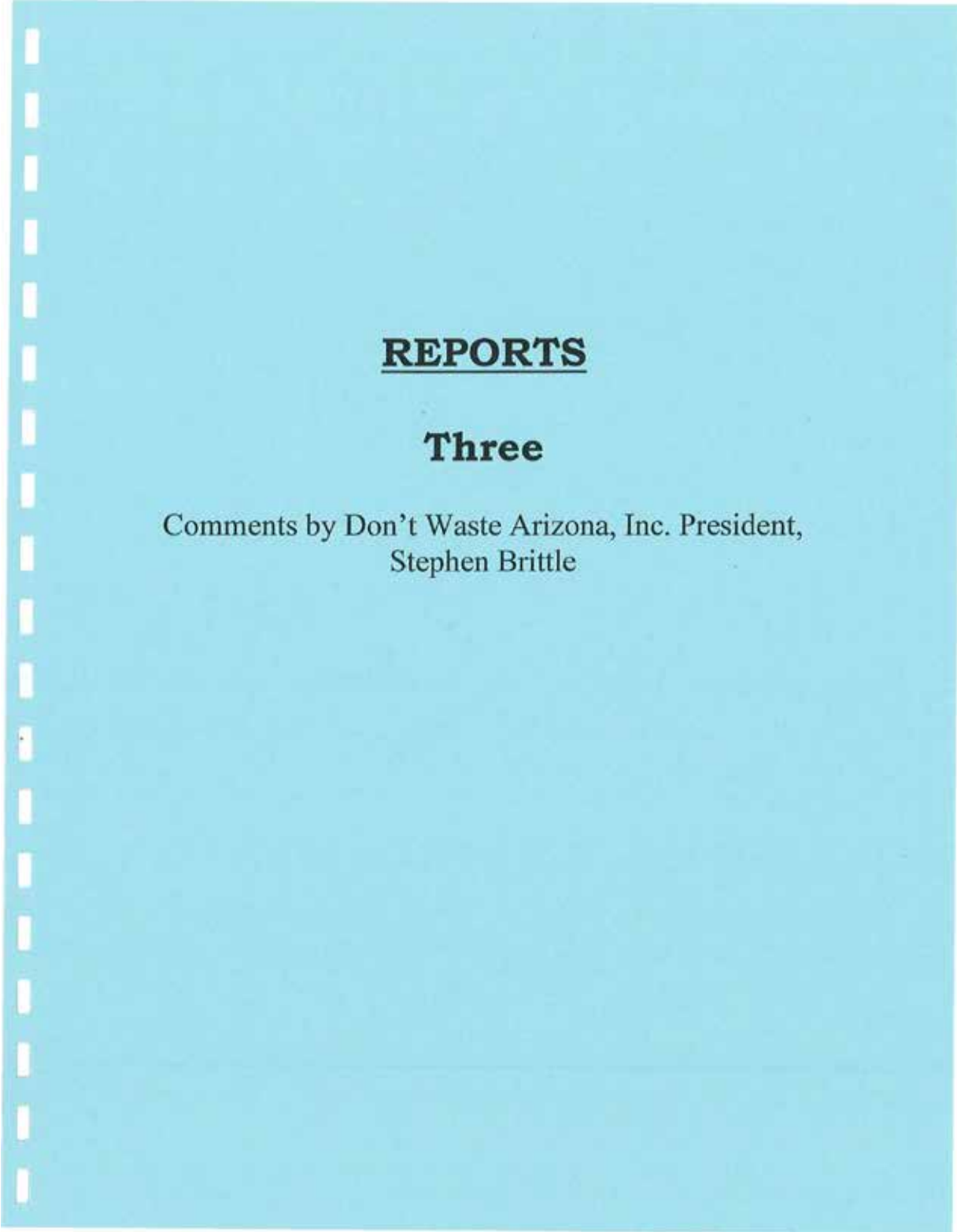
2. METHODOLOGY

The Arizona Population Projections Model is a Cohort-Component model. This model is used to project population for 10 race/ethnic groups in 16 geographical areas (Arizona state and its 15 counties) over a projection period of 40 years. The 10 race/ethnic groups are the combinations of five race groups by Hispanic origin. The five race groups are: White, Black, Native American, Asian (including Native Hawaiian and Pacific Islander), and Other (including two or more races). Each of these races is delineated into Hispanic origin and non-Hispanic origin to make a total of 10 race/ethnic groups.

A component methodology accounts for each aspect of demographic change (fertility, mortality, and migration). These components, each projected separately, are combined to produce population projections by age, sex, race, and ethnic group.

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	<p>Don't Waste Arizona, Inc. (DWAZ) is a non-profit environmental organization dedicated to the protection and preservation of the environment in Arizona. DWAZ is especially concerned about environmental justice, civil rights protections, risks from hazardous materials and toxics, and air pollution. DWAZ is headquartered at 6205 South 12th Street, Phoenix, AZ 85042, and may be reached at (602) 268-6110. DWAZ has members in the affected areas. DWAZ is allied with PARC, et al for the purposes of preparing comments in opposition to the freeway, and the use of these comments by these allies is allowed and unrestricted. DWAZ joins with PARC et al in these comments, and any and all co-parties are allowed to use these in litigation. Stephen Brittle, President of Don't Waste Arizona, is also a member of PARC.</p> <p>The following comments on the DEIS for the South Mountain Freeway were prepared for DWAZ, PARC, et al. . . .</p> <p>31 General Comments:</p> <p>The 4f analysis is done wrong, and uses old and outdated information and data.</p> <p>32 There is no analysis of having alternative to the freeway in the form of a road connecting Laveen to the I-10 west for the purposes of giving Laveen area residents a better access to the I-10. This would actually serve Laveen area residents' needs better because it would eliminate most of the traffic from trucks.</p> <p>Too many of the details are left to the "design phase" when they should be examined at this stage of the process.</p> <p>The intersection with I-10 west near 59rh Avenue fails in many ways. What about the severe traffic congestion that already occurs there during rush hour, as well as pollution impacts? Where is the current data showing traffic patterns?</p> <p>Why haven't there been any new concurrences since 2008?</p> <p>Have there been any new agreements since 2005-2007?</p> <p>The following are comments related to impacts to air pollution and air quality:</p> <p>Truck Traffic from Mexico and High-Sulfur Diesel; Truck Bypass Negated</p> <p>The modeling of air pollution impacts in the DEIS do not include the additional air pollution from truck traffic, and also from truck traffic originating in Mexico that would be using high sulfur diesel fuel that has been banned in the US. The DEIS briefly mentions the issue, but it claims it has no way to know what impact the change in the bypass route would be. That is patently absurd and unacceptable. The number of trucks coming over the border from Mexico is on record, and even if these trucks have hazardous materials in their cargoes is on record, HDR and ADOT simply have to get the</p>
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31	Section 4(f) and Section 6(f)	<p>The Arizona Department of Transportation and Federal Highway Administration followed all requirements of Section 4(f) of the Department of Transportation Act that are found in 49 United States Code § 303. The methodology employed follows 23 Code of Federal Regulations § 774 and standard industry practice. Under the National Environmental Policy Act, it is common for new data to avail itself and to therefore update the environmental impact statement as new data does become available.</p> <p>Reviewers have noted that newer trails in the South Mountains (Bursera and Pyramid Trails) were not discussed in the Draft Environmental Impact Statement. This information has been considered, investigated, and the effects of the proposed freeway on these facilities has been addressed (see Final Environmental Impact Statement, page 5-9). This new information has not changed the findings of the Section 4(f) analysis in the Draft Environmental Impact Statement.</p> <p>A thorough feasible and prudent avoidance analysis of the South Mountains was conducted as presented in Chapter 5 of the Final Environmental Impact Statement and concluded avoidance to the direct use of the resource was not feasible and prudent. In support of this response, consider the following review from the U.S. Department of the Interior on the Draft Environmental Impact Statement comment: "Following our review of the Section 4(f) Evaluation, we concur that there is no feasible or prudent alternative to the Preferred Alternative selected in the document, and that all measures have been taken to minimize harm to these resources." The complete letter can be found in Appendix 7, Volume III, on page B4 of the Final Environmental Impact Statement. The Section 4(f) analysis for the proposed action was properly performed.</p>
32	Purpose and Need	<p>The establishment of the purpose and need for the proposed action must follow 40 Code of Federal Regulations 1502.13. The comment reflects a concern about need related to west valley travel. Chapter 1, <i>Purpose and Need</i>, describes a regional transportation problem warranting a transportation solution. The alternatives considered and evaluated in Chapter 3, <i>Alternatives</i>, consider a comprehensive set of alternatives and take into account the need as presented in Chapter 1. During the modal screening process (see text beginning on page 3-3 of the Final Environmental Impact Statement), expansion of the arterial street system was considered. The reasons this alternative was eliminated are presented in Table 3-2 on page 3-5 of the Final Environmental Impact Statement.</p> <p>According to 23 Code of Federal Regulations § 771.111(f), "the action evaluated in the environmental impact statement must connect logical termini and be of sufficient length to address environmental matters on a broad scope ..." The proposed action should satisfy the project need and should be considered in the context of the local area's socioeconomics and topography, the future travel demand, and other infrastructure improvements in the area. A partial freeway from Interstate 10 (Papago Freeway) to Laveen Village is not feasible because it would not meet the proposed freeway's identified purpose and need.</p>

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	<p>Don’t Waste Arizona, Inc. (DWAZ) is a non-profit environmental organization dedicated to the protection and preservation of the environment in Arizona. DWAZ is especially concerned about environmental justice, civil rights protections, risks from hazardous materials and toxics, and air pollution. DWAZ is headquartered at 6205 South 12th Street, Phoenix, AZ 85042, and may be reached at (602) 268-6110. DWAZ has members in the affected areas. DWAZ is allied with PARC, et al for the purposes of preparing comments in opposition to the freeway, and the use of these comments by these allies is allowed and unrestricted. DWAZ joins with PARC et al in these comments, and any and all co-parties are allowed to use these in litigation. Stephen Brittle, President of Don't Waste Arizona, is also a member of PARC.</p> <p>The following comments on the DEIS for the South Mountain Freeway were prepared for DWAZ, PARC, et al. . . .</p> <p>General Comments:</p> <p>The 4f analysis is done wrong, and uses old and outdated information and data.</p> <p>There is no analysis of having alternative to the freeway in the form of a road connecting Laveen to the I-10 west for the purposes of giving Laveen area residents a better access to the I-10. This would actually serve Laveen area residents' needs better because it would eliminate most of the traffic from trucks.</p> <p>Too many of the details are left to the "design phase" when they should be examined at this stage of the process.</p> <p>The intersection with I-10 west near 59rh Avenue fails in many ways. What about the severe traffic congestion that already occurs there during rush hour, as well as pollution impacts? Where is the current data showing traffic patterns?</p> <p>Why haven't there been any new concurrences since 2008?</p> <p>Have there been any new agreements since 2005-2007?</p> <p>The following are comments related to impacts to air pollution and air quality:</p> <p>Truck Traffic from Mexico and High-Sulfur Diesel; Truck Bypass Negated</p> <p>The modeling of air pollution impacts in the DEIS do not include the additional air pollution from truck traffic, and also from truck traffic originating in Mexico that would be using high sulfur diesel fuel that has been banned in the US. The DEIS briefly mentions the issue, but it claims it has no way to know what impact the change in the bypass route would be. That is patently absurd and unacceptable. The number of trucks coming over the border from Mexico is on record, and even if these trucks have hazardous materials in their cargoes is on record, HDR and ADOT simply have to get the</p>
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Code	Issue	Response
33	Design	<p>Federal Highway Administration Order 6640.1A <i>FHWA Policy on Permissible Project Related Activities During the National Environmental Protection Agency Process</i> clarifies the Federal Highway Administration’s policy regarding the permissible project-related activities that may be advanced prior to the conclusion of the National Environmental Policy Act process. Preliminary design may occur to define the general project location and design concepts. It includes, but is not limited to, preliminary engineering and other activities and analyses, such as environmental assessments, topographic surveys, metes and bounds surveys, geotechnical investigations, hydrologic analysis, hydraulic analysis, utility engineering, traffic studies, financial plans, revenue estimates, hazardous materials assessments, general estimates of the types and quantities of materials, and other work needed to establish parameters for the final design. Prior to completion of the National Environmental Policy Act review process, any such preliminary engineering and other activities and analyses must not materially affect the objective consideration of alternatives in the National Environmental Policy Act review process.</p> <p>The current level of engineering is used to determine the limits of environmental and construction impacts that would be attributable to the proposed freeway. Location and the profile of the freeway would be evaluated to minimize potential changes to the freeway as the design level would progress. The current level of engineering is an accepted industry standard for determining impacts. (See Final Environmental Impact Statement sidebar on page 3-40 for more discussion.)</p>
34	Traffic	<p>An assessment of existing traffic operational characteristics and future traffic operational characteristics without the proposed freeway is presented in the Final Environmental Impact Statement, beginning on page 1-13. This includes current and future traffic volumes and durations of level of service E or F conditions (congestion) along Interstate 10 between State Route 101L and Interstate 17.</p> <p>An assessment of future traffic conditions with and without the proposed freeway is presented in the Final Environmental Impact Statement, beginning on page 3-27. Observations from Figures 3-15 and 3-16 indicate that conditions would be similar or slightly better with the proposed freeway in place.</p> <p>The traffic conditions presented in these sections are consistent with the environmental impact analysis for elements such as air quality and noise, and the results of those analyses can be found in their respective sections of Chapter 4 of the Final Environmental Impact Statement. The air and noise analyses were updated for the Final Environmental Impact Statement (see sections beginning on pages 4-68 and 4-88, respectively). It is important to note that no substantial differences between the analyses for the Draft and Final Environmental Impact Statements resulted from the update.</p>
35	Cultural Resources	<p>National Historic Preservation Act Section 106 consultation is summarized in Table 4-46 beginning on page 4-136 of the Draft Environmental Impact Statement. There have been a number of concurrences since 2008.</p>
36		<p>The comment is not specific enough in its reference to “agreements” to allow an accurate response.</p>

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Code	Issue	Response
37	Air Quality	<p>Arizona highways, as are most highways across the United States, are open to all kinds of traffic, so long as the cargo being carried is in accordance with U.S. Department of Transportation regulations for the specific type of cargo. The South Mountain Freeway, if implemented, is expected to operate under the same rules as other similar facilities in the state; truck traffic would be expected to be permissible (see text box on page 4-157 of the Final Environmental Impact Statement).</p> <p>Trucks crossing from Mexico to Arizona are restricted to the commercial zones within 25 miles of the border. The Federal Motor Carrier Safety Administration is administering a United States-Mexico cross-border, long-haul trucking pilot program. The program tests and demonstrates the ability of Mexico-based motor carriers to operate safely in the United States beyond the municipalities and commercial zones along the United States-Mexico border (see <fmcsa.dot.gov/intl-programs/trucking/trucking-program.aspx>).</p> <p>Petróleos Mexicanos (better known as Pemex), the Mexican state-owned petroleum company, has guaranteed 15 parts per million in its sulfur diesel fuel in the border region (see <http://transportpolicy.net/index.php?title=Mexico:_Fuels:_Diesel_and_Gasoline>).</p> <p>As explained on page 4-77 of the Final Environmental Impact Statement, the emissions analysis conducted for the project shows that future mobile source air toxics emissions will be lower than current levels. This analysis included projected truck traffic.</p>

Code	Comment Document
	<p>data and analyze it. This should be examined as a cumulative impact, an indirect impact, and a direct impact.</p> <p>There is a reason why the idea of a truck bypass around the urban core of Maricopa County came up in the first place, all those years ago. It is because there have been chronic issues about air quality in the Phoenix metro area, so bad and for so long that public policy makers suggested as one of the strategies to reduce particulate matter from truck exhaust in urban Maricopa County was to designate a bypass for truck traffic around the urban area.</p> <p>This bypass is also now the designated route of the Canamex Highway. It is Interstate 8 (south of Casa Grande) to State Highway 85, to Interstate 10, west of the Phoenix metro area. This was formally adopted by MAG (Maricopa Association of Governments on April 25, 2001. In the resolution of decision, the wording about air quality and for particulate matter under ten microns in diameter (PM-10) reveals the intent of the decision, , “BE IT RESOLVED that the Maricopa Association of Governments recommends the future designation of the CANAMEX Corridor within the Maricopa region to include I-8 between I-10 and SR 85, SR 85 between I-8 and I-10, and the US 93 / US 60 Wickenburg Bypass, with the connection between the SR 85 / I-10 junction and the Wickenburg Bypass to be designated following additional study but constrained to a location outside of the air quality nonattainment area for particulate matter under ten microns in diameter (PM-10) as specified in the “Revised MAG 1999 Serious Area Particulate Plan for PM-10 for the Maricopa County Nonattainment Area” (February 2000)</p> <p>[See http://www.azmag.gov/Documents/pdf/cms.resource/FinalCANAMEXResolution_670.pdf]</p> <p>The decisions about the truck bypass route came as part of a series of actions by MAG and the Arizona legislature to bring Maricopa County into compliance with the PM standards of the National Ambient Air Quality Standards (NAAQS) under the Clean Air Act and to stave off sanctions for noncompliance.</p> <p>Attainment Status Designation: Serious Nonattainment</p> <p>Maricopa County was reclassified as a serious PM₁₀ nonattainment area on June 10, 1996. On July 9, 1999, the Maricopa Association of Governments (MAG) submitted to EPA the <u>MAG 1999 Serious Area Particulate Plan for PM₁₀ (Executive Summary)</u>, addressing both the 24-hour and annual standards.</p> <p>A revised state implementation plan (SIP) was submitted in February 2000. (A state implementation plan is a plan that shows how the state will implement the Clean Air Act and meet the requirements of the National Ambient Air Quality Standards (NAAQS), i.e. comply with the standards for levels of air pollution allowed in the air) The Plan, based on new most stringent measures, included an extension request for attainment no later than December 31, 2006. On January 10, 2002, EPA announced approval of Arizona's</p>
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Code	Issue	Response
38	Trucks	<p>It is agreed that the truck bypass for the Phoenix metropolitan area would not include the proposed freeway. As with all other freeways in the Maricopa Association of Governments region, trucks would use the proposed freeway for the through-transport of freight, for transport to and from distribution centers, and for transport to support local commerce (see page 3-64 of the Final Environmental Impact Statement). The trucking industry depends on the efficient and fast movement of freight and on travel-time savings. Therefore, it is expected that “true” through-truck traffic (not having to stop in the metropolitan area) would continue to use the faster, designated, and posted bypass system of Interstate 8 and State Route 85. The comment offers no source or evidence.</p> <p>In April 2001, the Maricopa Association of Governments Regional Council formally adopted the route depicted in the map on page 3-64 as the CANAMEX Corridor within Maricopa County. As noted on page 3-64 of the Final Environmental Impact Statement, in the Maricopa County area the CANAMEX Corridor is to follow Interstate 10 from Tucson to Interstate 8 near Casa Grande, Interstate 8 west to State Route 85 near Gila Bend, State Route 85 north to Interstate 10 northwest of Buckeye, Interstate 10 west to Wickenburg Road, Wickenburg Road to Vulture Mine Road west of Wickenburg, and then connect with the planned U.S. Route 93/U.S. Route 60 Wickenburg Bypass.</p>
39	Air Quality	<p>In May 2012, the Arizona Department of Environmental Quality submitted a revised Maricopa Association of Governments 2012 Five Percent Plan for the region. On July 20, 2012, the U.S. Environmental Protection Agency made an official finding that the Maricopa Association of Governments 2012 Five Percent Plan was administratively complete. This decision ended the sanctions clocks associated with Arizona’s decision to withdraw the Maricopa Association of Governments 2007 Five Percent Plan. On February 6, 2014, the U.S. Environmental Protection Agency published a notice in the <i>Federal Register</i> proposing to approve the Maricopa Association of Governments <i>2012 Five Percent Plan for Attainment of the PM-10 Standard</i> for the Maricopa County Nonattainment Area. In the same notice, the U.S. Environmental Protection Agency stated that it would concur with exceptional event (as a result of haboobs and dust storms) documentation prepared by the Arizona Department of Environmental Quality, which would give the region the 3 years of clean data needed for attainment of the particulate matter (PM₁₀) 24-hour standard. Finally on May 30, 2014, the U.S. Environmental Protection Agency approved the 2012 Five Percent Plan and found the area in attainment of the 24-hour particulate matter (PM₁₀) standard based on monitoring data for the years 2010 to 2012 (see page 4-72 of the Final Environmental Impact Statement for more information).</p>

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39	<p>plan to attain the standards for PM₁₀ in the metropolitan Phoenix area by 2006. EPA's approval granted a 5-year extension of the attainment date for both the 24-hour and annual PM₁₀ standards to December. 31, 2006. Both decisions were published in the Federal Register on July 25, 2002 (67 FR 48718).</p> <p>On July 2, 2002, EPA found that more work was needed to achieve attainment of the 24-hour standard in the area of the Salt River monitoring site (43rd Avenue/Broadway). This resulted in the Revised PM10 State Implementation Plan for the Salt River Area in September 2005. [http://www.azdeq.gov/environ/air/plan/download/sr-sip.pdf]</p> <p>Despite the most stringent measures and best available control measures adopted and implemented earlier, the nonattainment area failed to attain the NAAQS by the extended deadline of December 31, 2006. This failure triggered a special requirement under Section 189(d) of the Clean Air Act that SIP revisions provide for annual reductions of PM₁₀ or PM₁₀ precursors of not less than 5 percent of the most recent emissions inventory, until the NAAQS is attained, be submitted to EPA by December 31, 2007. This SIP revision was prepared by the Maricopa Association of Governments and submitted to EPA by the deadline.</p> <p>The primary sources of particulate pollution in the area are construction activities, paved road dust, unpaved roads and parking lots, agricultural activities, windblown dust from disturbed vacant lots, construction sites, and agricultural fields, fires and open burning, dust from off-road recreational vehicles, leaf blowers, and exhaust from cars. (Emphasis added.)</p> <p>[http://www.maricopa.gov/aq/divisions/planning_analysis/state_implementation_plan.aspx]</p> <p>If the South Mountain Freeway is built, the bypass route, which has few amenities, would be a longer route and it is not a full freeway for the entire distance, while the South Mountain Freeway and Truck Bypass would be a modern highway. There is no law that would force trucks to use the longer original bypass route, so it is entirely likely most or even all these trucks would now come through Phoenix, negating the whole bypass strategy that had been agreed upon 12 years ago, and negating that public policy decision. By completing the South Mountain Freeway, this would all be negated, but the reversal of this public policy decision and the effects it might have on air pollution are never mentioned in the DEIS.</p> <p>Further, trucks originating in Mexico will be fueled with diesel that doesn't meet the CARB diesel standards adopted by Arizona over a decade ago. In Mexico, there is no regulation about the sulfur in diesel fuel. In Arizona, the law was changed to allow only diesel fuel to be sold that has had 98% of the sulfur removed. This was another part of the strategy to bring Maricopa County into compliance with the particulate matter standards required by the Clean Air Act (CAA).There was extensive modeling of the effect of adopting the CARB diesel standards and a discussion of this at the Arizona legislature, where it passed, so the data is in government hands. The CARB diesel standards for Arizona were adopted by EPA by rule in August 2008, which makes them part of the SIP.</p>

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40	Trucks	<p>The use of the proposed action by truck traffic is disclosed in the Draft Environmental Impact Statement (see page 3-64). Creating a truck bypass is not a goal of the proposed action and not established as part of the purpose and need as disclosed in full in Chapter 1, <i>Purpose and Need</i>, of the Draft Environmental Impact Statement. The proposed freeway is part of a transportation system developed to improve mobility in the region by increasing capacity and allowing traffic—including truck traffic—to access a segment of the “loop” system (see pages 1-21, 1-22, 3-1, and 3-3 of the Final Environmental Impact Statement) in the Phoenix metropolitan area. The proposed South Mountain Freeway would be a commuter corridor, helping to move local traffic. As with all other freeways in the region, trucks would use it for the through-transport of freight, for transport to and from distribution centers, and for transport to support local commerce. Nevertheless, the primary vehicle using the proposed freeway would be automobiles. The Maricopa Association of Governments regional travel demand model projects that trucks will represent approximately 10 percent of the total traffic on the proposed action, similar to what is currently experienced on other regional freeways such as Interstate 10, State Route 101L, and U.S. Route 60. Further, it is not expected that the entire 21 percent of through-truck traffic (by tonnage) using Interstate 10 would divert from Interstate 10 to use the proposed freeway (see Final Environmental Impact Statement page 3-64). Trucking destinations in the Phoenix metropolitan area would still prompt trucks to enter congested areas. Drivers choosing to travel on the proposed freeway versus Interstate 10 would not receive substantial travel-time benefits. Therefore, it is expected that “true” through-truck traffic (not having to stop in the metropolitan area) would continue to use the faster, designated, and posted bypass system of Interstate 8 and State Route 85.</p> <p>Trucks crossing from Mexico to Arizona are restricted to the commercial zones within 25 miles of the border. The Federal Motor Carrier Safety Administration is administering a United States-Mexico cross-border, long-haul trucking pilot program. The program tests and demonstrates the ability of Mexico-based motor carriers to operate safely in the United States beyond the municipalities and commercial zones along the United States-Mexico border (see fmcsa.dot.gov/intl-programs/trucking/trucking-program.aspx).</p> <p>Petróleos Mexicanos (better known as Pemex), the Mexican state-owned petroleum company, has guaranteed 15 parts per million in its sulfur diesel fuel in the border region (see http://transportpolicy.net/index.php?title=Mexico:_Fuels:_Diesel_and_Gasoline).</p> <p>As explained on page 4-77 of the Final Environmental Impact Statement, the emissions analysis conducted for the project shows that future mobile source air toxics emissions will be lower than current levels. This analysis included projected truck traffic.</p>

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40	<p>"August 4, 2008: Final rule regarding BACM and MSM demonstrations.</p> <p>Final rule to again approve the best available control measures (BACM) and most stringent measures (MSM) demonstrations in the Phoenix Area's PM-10 plan in response to a 9th Circuit Court of Appeals remand to re-evaluate the feasibility of implementing California Air Resources Board (CARB) diesel fuel as a BACM. <i>The correct docket number (as stated at the top of the document) is EPA-R09-OAR-2006-0571."</i></p> <p>http://www.epa.gov/region9/air/phoenixpm/</p> <p>Also, we know exactly the number of trucks arriving from Mexico and their destinations in the US, so this is data that is available for the DEIS.</p> <p>Once this additional pollution is honestly quantified and factored in, there would be a huge net increase in air pollution from the South Mountain Freeway and Truck Bypass, and associated increases in asthma, heart disease, premature death, and other adverse health impacts. This would lead to the No Build option being chosen as the only option.</p> <p>The DEIS does mention, in Chapter 4, part 1, page 68: "Heavy-duty Diesel Emissions Standards In December 2000, EPA issued its final rule in a two-part strategy to reduce diesel emissions from heavy-duty trucks and buses. The standards pertain to diesel engines found in such vehicles (weighing over 8,500 pounds), beginning in model year 2004. Additional standards and procedures were implemented in 2007.</p> <p>EPA required diesel fuel refiners to produce diesel fuels (for highway vehicle use) that have a sulfur content of no more than 15ppm, effective October 2006, a 97percent reduction from the previous 500ppm level."</p> <p>So ADOT and HDR have to aware of the issue regarding high sulfur diesel, but the impacts of truck traffic from Mexico using high sulfur diesel fuel and the additional pollution is not addressed.</p> <p>Air Toxics Already a Crisis but Not Mentioned</p> <p>In the DEIS, Chapter 4 part 1 page 64, it is stated, "Local Emissions of Priority MSATs (mobile sources of air toxics) It is possible to estimate the relative contributions (by weight of emissions) of the different local sources of priority M SATs using EPA-compiled information. In June 2009, EPA released the results of its National-Scale Air Toxics Assessment for 2002."</p> <p>In the DEIS, Chapter 4 part 1 page 68-69, it is stated, "Mobile Source Air Toxics</p>
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41		Quotes from Draft Environmental Impact Statement

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41	<p>Controlling air toxic emissions became a national priority with the passage of the Clean Air Act Amendments of 1990, whereby Congress mandated that EPA regulate 188 air toxics, also known as HAPs. EPA has assessed this expansive list in its latest rule on the Control of Hazardous Air Pollutants from Mobile Sources(Federal Register 72(37): 8430, February 26, 2007), and identified a group of 93 compounds emitted from mobile sources that are listed in its Integrated Risk Information System <www.epa.gov/iris/>. In addition, EPA identified seven compounds with significant contributions from mobile sources that are among the national- and regional-scale cancer risk drivers from its 1999 National Air Toxics Assessment <www.epa.gov/ttn/atw/nata1999/>. These are acrolein; benzene; 1,3-butadiene; DPM plus diesel exhaust organic gases; formaldehyde; naphthalene; and POM. While F H WA considers these the priority MSATs, the list is subject to change and may be adjusted in consideration of future EPA rules."</p> <p>"Information Availability Constraints in Analyzing Project-Specific MSATs Impacts This section includes a basic analysis of the likely M SATs emissions impacts of the proposed action and the No -Action Alternative. Available technical tools do not, however, enable the prediction of project-specific health impacts of the emissions changes associated with the action alternatives. Because of these limitations, the following discussion is included in accordance with Council on Environmental Quality (CEQ) regulations [40 C.F.R . § 1502.22(b)] regarding incomplete or unavailable information. 40 C.F.R. § 1502.22(b) addresses situations where analysis of an impact in a NEPA document is restricted by missing or incomplete information, and requires the NEPA document to 1) state that there is missing or incomplete information, 2) discuss the relevance of this information, 3) summarize what is known about the impact in question, and 4) in the face of what is known and not known, present the federal agency's evaluation of the likely impact.</p> <p>In F H WA's view, information is incomplete or unavailable to credibly predict the project-specific health impacts attributable to changes in MSAT emissions associated with a proposed set of freeway alternatives. The outcome of such an assessment, adverse or not, would be influenced more by the uncertainty introduced into the process through assumption and speculation rather than any genuine insight into the actual health impacts directly attributable to MSAT exposure associated with a proposed action."</p> <p>But there is already very complete and specific data related to all of this that was excluded and is not properly reviewed or analyzed, and it is much more recent.</p> <p>In 2005, there was an extensive air monitoring of certain toxic chemicals (air toxics) conducted by EPA and ADEQ in a joint effort named the Joint Air Toxics Assessment Program (JATAP). This was conducted at specific sites in Maricopa County that modeling showed would likely be hot spots for air toxics, including a site on the Gila River Indian Community (GRIC), that would be adjacent to the South Mountain Freeway and Truck Bypass.</p> <p>[These JATAP study results are posted at:</p>
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42	Air Quality	<p>The Joint Air Toxics Assessment Project compares monitored values to the Environmental Protection Agency's one-in-a-million risk threshold, but this numerical benchmark is not a "standard" in the sense that it represents a pass/fail threshold (like the National Ambient Air Quality Standards).</p> <p>This issue is discussed in Appendix F of the Air Quality Technical Report, where examples are provided where the U.S. Environmental Protection Agency itself has promulgated emissions control regulations that result in residual risk of more than one in a million (i.e., the Environmental Protection Agency considered it "acceptable" to adopt regulations that did not reduce risk to a level below one in a million).</p> <p>Summary information about the findings of the Joint Air Toxics Assessment Project study is provided as background information in the Draft and Final Environmental Impact Statements, but the study itself is not relevant to the type of analysis done pursuant to the Federal Highway Administration's mobile source air toxics guidance, which is an emissions analysis. Monitored ambient concentrations of mobile source air toxics (the focus of the Joint Air Toxics Assessment Project) do not inform this type of analysis. While monitoring data can be useful for defining current conditions in the affected environment (to the extent that the monitoring data are current), they don't tell us anything about future conditions, or the impacts of the project itself, which is why an emissions analysis was performed. The mobile source air toxic analysis presented beginning on page 4-77 of the Final Environmental Impact Statement is an estimated inventory of mobile source air toxic emissions for the entire Study Area for 2025 and 2035. This approach was used because the inventory estimate accounts for changes in traffic and emissions on all roadways affected by a proposed project, and would, therefore, be a more reliable predictor of changes in exposure to mobile source air toxics.</p>

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42	<p>http://yosemite.epa.gov/r9/sfund/r9sfdocw.nsf/3dc283e6c5d6056f88257426007417a2/bd0cae65f8ca89368825790d0056f0e4/\$FILE/Final%20Rpt_Phoenix%20Air%20Toxics_JATAP%202005.pdf]</p> <p>The monitoring sites included a site near St. Johns on the Gila River Indian Community (GRIC), and some of the other monitoring sites were in west Phoenix and South Phoenix. The JATAP monitoring results were reported in 2006, during a time the data for the DEIS was being gathered. The JATAP monitoring results found levels of certain toxic chemicals associated with vehicular emissions were above the standard of a one in a million chance of cancer in a lifetime of exposure in the west Phoenix, south Phoenix, and GRIC sites.</p> <p>The JATAP monitoring at the St. Johns monitoring site on the GRIC found certain air toxics attributed to “mobile sources,” or vehicular traffic burning hydrocarbons. These findings of the air toxics were many times the "accepted" cancer risk standard set by USEPA.</p> <p>The St. Johns monitoring site's annual mean concentrations of mobile source air toxics (MSATs):</p> <ul style="list-style-type: none">• benzene at 4.7 times the accepted cancer risk standard;• 1,3 butadiene at 3.9 times the accepted cancer risk standard <p>The JATAP study also found other air toxics associated with transportation exhaust. Acetaldehyde, formaldehyde, ethylbenzene, m,p-Xylene, o-Xylene, and toluene were detected at high levels at the St. Johns monitoring site.</p> <p>Residents of the GRIC living around and adjacent to the monitoring site are currently being subjected to all of these carcinogens, not just one. And if a freeway were to be built near this monitoring site on the GRIC, there would be more air toxics in addition to the ones detected at levels that far exceed the USEPA risk standard.</p> <p>At the West Phoenix monitoring site, which is the same 43rd Avenue and Broadway site that has had many exceedances of the particulate matter standards, even higher levels of air toxics were found. This site is about a mile or so downwind from the proposed route of the South Mountain Freeway, and air toxics levels would be impacted by the freeway.</p> <p>The West Phoenix monitoring site's annual mean concentrations of mobile source air toxics (MSATs):</p> <ul style="list-style-type: none">• benzene at 18.7 times the accepted cancer risk standard;• 1,3 butadiene at 21.5 times the accepted cancer risk standard <p>The JATAP study also found other air toxics associated with transportation exhaust. Formaldehyde, ethylbenzene, m,p-Xylene, o-Xylene, and toluene were detected at high levels at the West Phoenix monitoring site.</p>

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43	Air Quality	<p>The emission modeling developed for the proposed action showed that for the mobile source air toxics study area, constructing the freeway would have a marginal effect on total mobile source air toxics emissions in 2025 and 2035 (less than a 1 percent difference in total annual emissions between the Preferred Alternative and No-Action Alternative) (see discussion beginning on page 4-72 of the Final Environmental Impact Statement). With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions.</p> <p>The Preferred Alternative would also reduce in-vehicle mobile source air toxics exposure as opposed to the No-Action Alternative. The U.S. Environmental Protection Agency has found that in-vehicle benzene concentrations were between 2.5 and 40 times higher than nearby ambient concentrations, based on a review of studies discussed in the Regulatory Impact Analysis for the U.S. Environmental Protection Agency’s 2007 mobile source air toxics rule-making (Final Regulatory Impact Analysis, Environmental Protection Agency 420-R-07-002, 3-17 [February 2007]).</p> <p>Construction of the South Mountain Freeway would result in a reduction in benzene exposure to drivers and passengers for two reasons: decreased travel times (motorists would spend less time in traffic to reach their destinations) and lower emissions rates (attributable to speed improvements). Reducing on-road exposure would provide a health benefit for motorists using the freeway under consideration. Congestion relief resulting from the proposed freeway would provide localized air quality emissions reductions on area freeways and arterial streets and at interchanges, benefiting users of area highways and those living near congested roads.</p>

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43	<p>One of the JATAP's findings presented to the EPA National Air Monitoring Conference in November 2006 was, "Annual average concentrations of formaldehyde, acetaldehyde, benzene and 1,3 butadiene were on the high end of the range reported in EPA funded assessments of other US cities." This finding relates to any future proposed freeway in the JATAP study area, which includes in entirety the route of the proposed South Mountain Freeway and Truck Bypass.</p> <p>In the December 2006 ANALYSIS OF AIR TOXICS COLLECTED AS PART OF THE JOINT AIR TOXICS ASSESSMENT PROJECT FINAL REPORT, Page 3-6, it states this with more precision: "How Do Air Toxics Concentrations Compare with Typical National Levels? Phoenix area urban concentrations of 1,3-butadiene, acetaldehyde, formaldehyde, chloroform, benzene, and tetrachloroethene were typically on the high end of the national urban scale (i.e., above the 75th percentile). Other air toxics concentrations were typically within the interquartile range of national concentrations (25th to 75th percentile)."</p> <p>So the air toxics are already worse than many other areas of the United States, and the proposed freeway would add even more. Obviously, adding more vehicular traffic emissions by building a freeway where there had not been one would add to this toxic burden. And because this is an ethnic minority community, Native Americans, there are civil rights and environmental justice issues involved, also.</p> <p>ADOT and the Maricopa Association of Governments (MAG) were not stakeholders or involved in the JATAP, so these agencies had no control over the science or the direction of the JATAP, and certainly had no authority to stop the project from finding data that would not support building the South Mountain Freeway and Truck Bypass. But the JATAP results are barely mentioned in the DEIS, then discounted and misrepresented. Instead there is a strange and unsubstantiated missive about the uncertainty of the risk from these air toxics standards, and associated modeling methodologies, which is simply not true. ADOT is quite suspect in these regards. The cancer risk standards have been promulgated and published by EPA after extensive research and study, and they are well-known and peer-reviewed.</p> <p>In EPA's own words: "The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing comprehensive evaluation of air toxics in the U.S. EPA developed the NATA as a state-of-the-science screening tool for State/Local/Tribal Agencies to prioritize pollutants, emission sources and locations of interest for further study in order to gain a better understanding of risks. NATA assessments do not incorporate refined information about emission sources, but rather, use general information about sources to develop estimates of risks which are more likely to overestimate impacts than underestimate them. NATA provides estimates of the risk of cancer and other serious health effects from breathing (inhaling) air toxics in order to inform both national and more localized efforts to identify and prioritize air toxics, emission source types and locations which are of greatest potential concern in terms of contributing to population risk. This in turn helps air pollution experts focus limited analytical resources on areas and or populations</p>
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45	

Code	Issue	Response
44	Air Quality	<p>The Draft and Final Environmental Impact Statements present information and analysis about the proposed action and the enhanced conditions when compared against the No-Action Alternative and would not cause substantial adverse effects. The results of the analysis are summarized in the prologue to the Final Environmental Impact Statement (page xiii) and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement. The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones.</p> <p>The Draft Environmental Impact Statement provided the results of modeling for each of the seven priority mobile source air toxics, in both the Eastern and Western Subareas, and compared relative mobile source air toxics emissions that would result from three different potential alternatives (W59, W71, W101) as compared with the No-Action Alternative. It also included modeling of mobile source air toxics emissions in the overall mobile source air toxics study area assuming the W59 Alternative (see pages 4-70 to 4-74 of the Draft Environmental Impact Statement) along with implementation of recent U.S. Environmental Protection Agency mobile source air toxics rules.</p> <p>During the period when the project has been under review, the U.S. Environmental Protection Agency has issued two rules on controlling mobile source air toxics emissions from motor vehicles (66 <i>Federal Register</i> 17229 [March 29, 2001] and 72 <i>Federal Register</i> 8427 [February 26, 2007]). In those rules, the U.S. Environmental Protection Agency examined the impacts of existing and newly promulgated mobile source control programs, including its reformulated gasoline program, its national low emission vehicle standards, its Tier 2 motor vehicle emissions standards and gasoline sulfur control requirements, and heavy duty engine and vehicle standards and on-highway diesel fuel sulfur control requirements. As a result, the U.S. Environmental Protection Agency adopted controls on gasoline and passenger vehicles that significantly reduce emissions of benzene and other mobile source air toxics such as 1,3-butadiene; formaldehyde; acetaldehyde; acrolein; and naphthalene; as well as significant reductions in emissions of particulate matter from passenger vehicles. On March 3, 2014, the U.S. Environmental Protection Agency also promulgated new "Tier 3" vehicle and fuel regulations, which will produce additional reductions of mobile source air toxics pollutants. Since these reductions have not yet been incorporated into the U.S. Environmental Protection Agency's emissions model, they are not accounted for in the South Mountain Freeway analysis.</p> <p>The emission modeling developed for the proposed action showed that for the mobile source air toxics study area, there would be little difference in total annual emissions of mobile source air toxics emissions between the Preferred and No-Action Alternatives (less than a 1 percent difference) in 2025 and 2035. With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions (see discussion beginning on page 4-77 of the Final Environmental Impact Statement).</p>

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45	<p>where the potential for health risks are highest. Assessments include estimates of cancer and non-cancer health effects based on chronic exposure from outdoor sources, including assessments of non-cancer health effects for Diesel Particulate Matter (PM). Assessments provide a snapshot of the outdoor air quality and the risks to human health that would result if air toxic emissions levels remained unchanged." [http://www.epa.gov/nata/]</p> <p>As for the JATAP itself, the modeling conducted before the monitoring indicated certain issues that might be clarified: "Objectives for Monitoring NATA results indicate that, overall, VOCs and carbonyls are the biggest risk drivers</p> <ul style="list-style-type: none">– Particulate metals significant in some areas•Additional monitoring needed to compare with model results– Annual average concentrations of key HAPs– Spatial gradients– Potential hot spots (near freeway environments) (Emphasis added.)– Diurnal variability– Source identification through fingerprinting– Which HAPs contribute most to the risk?" <p>In the DEIS, Chapter 4 part 1, page 75, it states, "Mobile Source Air Toxic Hot Spots Given concerns about the possibility of MSAT exposure in the near-road environment, The HEI dedicated a number of research efforts at trying to find an MSAT "hotspot." In 2011, three studies were published that tested this hypothesis. In general, the authors confirm that while highways are a source of air toxics, they were unable to find that highways were the only source of these pollutants. They determined that near road exposures were often no different or no higher than background or ambient levels of exposure and, hence, no true hot spots were identified. Additional information may be found at <pubs.healtheffects.org/getfile.php?u=659> page 137, <pubs.healtheffects.org/getfile.php?u=656> page 143, and <pubs.healtheffects.org/getfile.php?u=617> page 87, where monitored on-road emissions were higher than emission levels monitored at near-road residences, but the issue of hot spots was not ultimately discussed." (Emphasis added.).</p> <p>Yes, the JATAP, its purpose, its results, its recommendations, all would be a reason to not build the freeway, to determine No Build as the only acceptable alternative. So the JATAP is barely mentioned and misrepresented, and the EPA's Air Toxics program is downplayed and obfuscated, and an inconclusive study that admittedly doesn't discuss the issue of hot spots gets the focus. In NEPA, if a project causes a negative, a problem, ways to eliminate or mitigate the damage have to be examined and assessed. In this case, not building a freeway near a site that has already been identified as being at a higher risk due to the same sorts of toxic air pollution found by freeways would be the only logical conclusion. So no wonder ADOT and HDR excluded the JATAP results and included a propaganda missive against the EPA's Air Toxics Program.</p>
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44 (cont.)		For mobile source air toxics, the project would have a negligible effect on emissions in the mobile source air toxics study area. The Preferred Alternative would also reduce in-vehicle mobile source air toxics exposure as opposed to the No-Action Alternative. The U.S. Environmental Protection Agency has found that in-vehicle benzene concentrations were between 2.5 and 40 times higher than nearby ambient concentrations, based on a review of studies discussed in the Regulatory Impact Analysis for the U.S. Environmental Protection Agency's 2007 mobile source air toxics rule-making (Final Regulatory Impact Analysis, Environmental Protection Agency 420-R-07-002, 3-17 [February 2007]). Construction of the South Mountain Freeway would result in a reduction in benzene exposure to drivers and passengers for two reasons: decreased travel times (motorists would spend less time in traffic to reach their destinations) and lower emissions rates (attributable to speed improvements). Reducing on-road exposure would provide a health benefit for motorists using the freeway under consideration. Congestion relief resulting from the proposed freeway would provide localized air quality emissions reductions on area freeways and arterial streets and at interchanges, benefiting users of area highways and those living near congested roads.
45	Health Risk Assessment	<p>The Role of Health Risk Assessment in a National Environmental Policy Act Context</p> <p>The Federal Highway Administration's National Environmental Policy Act documents are developed under two guiding regulations: the Council on Environmental Quality's National Environmental Policy Act regulations applicable to all federal agencies (40 Code of Federal Regulations Parts 1500–1508) and the Federal Highway Administration's implementing regulations governing Federal Highway Administration National Environmental Policy Act documents (23 Code of Federal Regulations Part 771). In its mobile source air toxics guidance, the Federal Highway Administration discusses 40 Code of Federal Regulations Part 1502.22 and acknowledges that while much work has been done to assess the overall health risk of mobile source air toxics, analytical tools and techniques for assessing project-specific health outcomes as a result of lifetime exposures to mobile source air toxics remain limited. These limitations impede the ability to evaluate the potential health risks attributable to exposure to mobile source air toxics as part of the decision-making process in the National Environmental Policy Act context. However, as with any analysis that the Federal Highway Administration conducts for National Environmental Policy Act purposes, the Federal Highway Administration's approach for mobile source air toxic analysis in National Environmental Policy Act documents is informed not just by 40 Code of Federal Regulations Part 1502.22, but by all applicable Council on Environmental Quality requirements.</p> <p>The appropriateness of air toxics health risk assessment as an analysis method for National Environmental Policy Act documents is discussed below, in the context of Council on Environmental Quality requirements for these documents. In addition to the 40 Code of Federal Regulations Part 1502.22 provisions regarding uncertainty and limitations discussed in the Federal Highway Administration's MSAT Interim Guidance Appendix C, three other provisions of the Council on Environmental Quality regulations are particularly relevant to the topic of health risk assessment:</p>

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45 (cont.)		<p>40 Code of Federal Regulations § 1500.1(b): NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA. Most important, NEPA documents must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail.</p> <p>40 Code of Federal Regulations § 1502.1: An environmental impact statement is more than a disclosure document. It shall be used by Federal officials in conjunction with other relevant material to plan actions and make decisions.</p> <p>40 Code of Federal Regulations § 1502.2: (a) Environmental impact statements shall be analytic rather than encyclopedic. (b) Impacts shall be discussed in proportion to their significance.(c) Environmental impact statements shall be kept concise and shall be no longer than absolutely necessary to comply with NEPA and with these regulations.</p> <p>Section 1500.1(b) states that information for decision making must be of high quality and based on accurate scientific analysis. Air toxics health risk assessments can involve large uncertainties. The mobile source air toxic health risk assessment uncertainty builds on itself—each step of the analysis involves uncertainties, including modeling traffic and then modeling emissions, and using this estimated output to model dispersion/concentrations, which provide information for estimating or assuming exposures to those concentrations, and finally predicting health outcomes. Major uncertainties are associated with traffic and emissions projections over a 70-year period, and dispersion models are typically held to a “factor of 2” performance standard. Health impacts of mobile source air toxics in the U.S. Environmental Protection Agency Integrated Risk Information System are based on a 70-year lifetime exposure, which introduces significant uncertainty (e.g., on average, people in the United States change residence approximately once every 8 years and change jobs once every 3). Finally, as noted above, the U.S. Environmental Protection Agency’s Integrated Risk Information System provides toxicity (risk) values for various pollutants and routes of exposure; in a health risk assessment, the Federal Highway Administration would compare calculated concentrations of mobile source air toxic pollutants to the Integrated Risk Information System values to estimate health risk. In the Integrated Risk Information System, the U.S. Environmental Protection Agency states the toxicity values are believed to be accurate to within an order of magnitude (a factor of 10). The total cumulative uncertainty involved in highway project health risk assessment is much larger than the change in emissions attributable to projects (typically a few percentage points). In this context, the information would not necessarily have a strong nexus to the requirements for high-quality information and accurate scientific analysis.</p> <p>Section 1500.1(b) also directs agencies to focus their National Environmental Policy Act analysis and documentation on issues that are truly significant to the action in question. In the context of mobile source air toxics, the Federal Highway Administration must consider whether changes in mobile source air toxic emissions attributable to a project have the potential for significant health risk. Using cancer risk as an example, the U.S. Environmental Protection Agency estimates that the overall risk of cancer in the United States is approximately 330,000 in a million, and that air toxics (from all sources) are responsible for a risk of approximately 50 in a million. In its most recent mobile source air toxics rule-making, the U.S. Environmental Protection Agency estimated mobile source air toxic cancer risk,</p>

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45 (cont.)		<p>after implementation of emissions controls, at approximately 5 in a million (or 0.0015 percent of overall cancer risk from any cause). For the Preferred Alternative, the mobile source air toxic emissions analysis for the Study Area found little difference in total annual emissions of mobile source air toxic emissions between the Preferred and No Action Alternatives (less than a 1 percent difference) in 2025 and 2035. With the Preferred Alternative in 2035, modeled mobile source air toxic emissions would decrease by more than 80 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions (see the discussion beginning on page 4-77 of the Final Environmental Impact Statement).</p> <p>In summary, available information from the U.S. Environmental Protection Agency indicates that mobile source air toxics are a small component of overall cancer risk, and the analysis for the Final Environmental Impact Statement indicates both that the Preferred Alternative would result in a small change in the emissions contributing to this risk and that emissions will decline by a large amount regardless of alternative.</p> <p>As discussed above and in the air quality technical report, results from the health risk assessment would be influenced more by the uncertainty introduced into the process through assumptions and speculations rather than by genuine insight into the actual health impacts directly attributable to mobile source air toxic exposure associated with a project. Therefore, outcomes of such a health risk assessment do not provide useful information for decision makers, as required by Section 1502.1. The Federal Highway Administration emissions analysis meets the requirement to produce information that is useful for both disclosure and decision making because it allows the public and decision makers to see which alternative has less mobile source air toxic emissions, with much less uncertainty than a health risk assessment.</p> <p>Given the uncertainty of a mobile source air toxic health risk assessment, the Federal Highway Administration instead addresses the potential impacts of mobile source air toxics through an emissions assessment in its National Environmental Policy Act documents. For smaller projects with a lower likelihood of a meaningful impact, this discussion is qualitative. For larger projects, emissions analysis is conducted. The Federal Highway Administration approach is consistent with the Council on Environmental Quality’s direction in Section 1502.2(b) to discuss impacts in proportion to their significance. The results of an emissions analysis can be summarized concisely in a National Environmental Policy Act document and provide useful information for decision makers (e.g., an alternative that has lower emissions is likely to be “better” from a mobile source air toxics health risk standpoint than one that has higher emissions).</p>

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45 (cont.)		<p>While the U.S. Environmental Protection Agency and the Federal Highway Administration both agree on the usefulness of addressing mobile source air toxics in National Environmental Policy Act documents for highway projects, the agencies disagree about the value of health risk assessment as a method for doing so.</p> <p>Another consideration with respect to health impacts is that the Preferred Alternative would also reduce in-vehicle mobile source air toxics exposure as opposed to the No Action Alternative. The U.S. Environmental Protection Agency has found that in-vehicle benzene concentrations were between 2.5 and 40 times higher than nearby ambient concentrations, based on a review of studies discussed in the Regulatory Impact Analysis for the U.S. Environmental Protection Agency’s 2007 mobile source air toxics rule-making (Final Regulatory Impact Analysis, Environmental Protection Agency 420-R-07-002, 3-17 [February 2007]). Construction of the Preferred Alternative would result in a reduction in benzene exposure to drivers and passengers for two reasons: decreased travel times (motorists would spend less time in traffic to reach their destinations) and lower emissions rates (attributable to speed improvements). Reducing on-road exposure would provide a health benefit for motorists using the roadway network. Congestion relief resulting from the proposed freeway would provide localized air quality emissions reductions on area freeways and arterial streets and at interchanges, benefiting users of area highways and those living near congested roads.</p> <p>The Federal Highway Administration determined that a supplemental environmental impact statement is not required at this time because there were no changes to the proposed action that will result in significant environmental impacts not evaluated in the Draft Environmental Impact Statement nor is there new information relevant to environmental concerns and bearings on the proposed action or its impacts that will result in significant environmental impacts not evaluated in the Draft Environmental Impact Statement.</p>

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45	<p>The impacts of the South Mountain Freeway on MSAT levels in the affected areas near the freeway should be examined as a cumulative impact, an indirect impact, and a direct impact</p> <p>Further investigation reveals that when the JATAP results were announced, the presentation, <i>Joint Air Toxics Assessment Project (JATAP) for the Project (JATAP) for the Maricopa/Pinal Urban Area, Maricopa/Pinal Urban Area, Arizona</i> <i>Presented by: Mike Sundblom, Arizona Department of Environmental Quality</i> <i>Christella Armijo, Salt River Pima Maricopa Indian Community</i> <i>Hilary Hafner, Sonoma Technology, Inc.</i> <i>To: EPA National Air Monitoring Conference</i> <i>Date: November 8, 2006</i> found on-line at: http://www.epa.gov/ttnamti1/files/2006conference/sundblomarmijo.pdf revealed other issues relating to this proposed freeway and truck bypass. At http://yosemite.epa.gov/oar/communityassessment.nsf/05426cd645cac06b85256ddb00510ac3!OpenForm&ParentUNID=8CB9AE50D0156C4B852576A5002C4867, the following is posted:</p> <p>Maricopa County, Arizona, Joint Air Toxics Assessment Project (JATAP)</p> <p>As a result of this project, will further data be collected, monitoring be conducted, or additional problem identification studies undertaken? Will refinements be made to modeling or exposure and/or toxicity assumptions?</p> <p>If the project is complete, what recommendations were made to reduce risk and/or emissions or otherwise mitigate the impacts of the problems identified as a result of this project? <i>Examples of recommendations include: encouraging control of HAP from mobile sources, educating a community about the impacts of indoor air pollution, encouraging appropriate action to reduce diesel truck exhaust, and encouraging community involvement with State and EPA resources to reduce HAP emissions.</i></p> <p>If the project is complete, were reduction activity emissions or risk reductions calculated?</p> <p>Are reduction factors being developed?</p> <p>What are the expected reductions achieved by the individual activities?</p> <p>Will the results of this project contribute to regulatory development, enforcement actions, or voluntary actions?</p>
46	<p>If the project is complete, what recommendations were made to reduce risk and/or emissions or otherwise mitigate the impacts of the problems identified as a result of this project? <i>Examples of recommendations include: encouraging control of HAP from mobile sources, educating a community about the impacts of indoor air pollution, encouraging appropriate action to reduce diesel truck exhaust, and encouraging community involvement with State and EPA resources to reduce HAP emissions.</i></p> <p>If the project is complete, were reduction activity emissions or risk reductions calculated?</p> <p>Are reduction factors being developed?</p> <p>What are the expected reductions achieved by the individual activities?</p> <p>Will the results of this project contribute to regulatory development, enforcement actions, or voluntary actions?</p>

Code	Issue	Response
46	Air Quality	<p>The Joint Air Toxics Assessment Project was funded by the U.S. Environmental Protection Agency; it would be the U.S. Environmental Protection Agency’s decision whether to collect further data or studies related to the Joint Air Toxics Assessment Project.</p> <p>See: Phoenix, Arizona Air Toxics Assessment-Final Comprehensive Report (September 30, 2011)</p>

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46	<p>Additional Comments:</p> <p>Are future projects/efforts planned or refined as a result of this project?</p> <p>Together, these projects are building toward a much needed air toxics risk assessment for the Phoenix urban area. At this early stage, the project is oriented toward technical assessment work; as the work progresses, EPA should use the opportunity of providing grant funding to ensure that our priorities, including community involvement and early reduction programs, are addressed.</p> <p>Are there any major uncertainties or cautions regarding the project process or findings?</p> <p>Are there any lessons learned that would benefit other projects?</p> <p>Focusing on: " Examples of recommendations include: encouraging control of HAP from mobile sources, educating a community about the impacts of indoor air pollution, encouraging appropriate action to reduce diesel truck exhaust, and encouraging community involvement with State and EPA resources to reduce HAP emissions." Controlling HAP from mobile sources and encouraging appropriate action to reduce diesel truck exhaust relate directly to the proposed South Mountain Freeway and Truck Bypass, as the <u>only</u> way to successfully accomplish that would be to not build the freeway. It appears that ADOT, through its contractor, HDR, deliberately misrepresented the JATAP monitoring results and its recommendations from the DEIS precisely because it strongly supports the No Build conclusion for the Record of Decision of the NEPA process for the proposed freeway. There can be no other logical conclusion. (This also explains the aforementioned lack of data and analysis of the impacts of the emissions from the high diesel fuel truck traffic from Mexico that would be driving along the South Mountain Freeway and Truck Bypass.)</p> <p>There are also Environmental Justice concerns raised by this. Chapter 4, page 9, the DEIS feigns concerns about environmental justice and notes that one of the "fundamental environmental justice principles [that] apply to the transportation project development process" is "to avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations." [http://azdot.gov/SouthMountainFreeway/PDF/south-mountain-loop-202-docs/EIS/chapter4/chapter4part1.pdf]</p>
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47	Environmental Justice and Title VI and Air Quality	<p>Summary information about the findings of the Joint Air Toxics Assessment Project study is provided as background information in the Draft and Final Environmental Impact Statements, but the study itself is not relevant to the type of analysis done pursuant to the Federal Highway Administration’s mobile source air toxics guidance, which is an emissions analysis. Monitored ambient concentrations of mobile source air toxics (the focus of the Joint Air Toxics Assessment Project) do not inform this type of analysis. While monitoring data can be useful for defining current conditions in the affected environment (to the extent that the monitoring data are current), they don’t tell us anything about future conditions, or the impacts of the project itself, which is why an emissions analysis was performed. The mobile source air toxic analysis presented beginning on page 4-77 of the Final Environmental Impact Statement is an estimated inventory of mobile source air toxic emissions for the entire Study Area for 2025 and 2035. This approach was used because the inventory estimate accounts for changes in traffic and emissions on all roadways affected by a proposed project, and would, therefore, be a more reliable predictor of changes in exposure to mobile source air toxics.</p> <p>The air quality assessment for the proposed freeway analyzed impacts from carbon monoxide and particulate matter (PM₁₀) and followed U.S. Environmental Protection Agency guidelines. The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones. For mobile source air toxics, the analysis showed that for the Study Area, constructing the freeway would have a marginal effect on annual emissions in 2025 and 2035 (less than a 1 percent difference in total annual emissions between the Preferred Alternative and No-Action Alternative).With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions. The air quality analyses were updated for the Final Environmental Impact Statement, including a quantitative particulate matter (PM₁₀) analysis, and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement.</p> <p>Congestion relief resulting from the proposed freeway would provide localized air quality emissions reductions on area freeways and arterial streets and at interchanges, benefiting users of area highways and those living near congested roads. The section entitled <i>Title VI and Environmental Justice</i>, beginning on page 4-29 in the Draft Environmental Impact Statement, presents acceptable methods, data, and assumptions to assess the potential for disproportionately high and adverse effects from the proposed action on environmental justice populations and disparate impacts to populations protected under Title VI. Based upon the content of the section, no such effects would result from the action alternatives.</p> <p>In light of comments received on the Draft Environmental Impact Statement, the above-referenced conclusions were confirmed in the preparation of the Final Environmental Impact Statement. To provide further clarity, the discussions of environmental justice and Title VI were separated and additional text explaining the relationship of environmental justice and Title VI to various environmental elements was added throughout Chapter 4, <i>Affected Environment, Environmental Consequences, and Mitigation</i>, as exemplified by the inserted text on page 4-29 of the Final Environmental Impact Statement.</p>

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47	<p><i>Thus, the failure to properly analyze and/or address the air toxics information from the JATAP study is a deliberate violation of the very Environmental Justice issues that ADOT and FHWA claim to be observing.</i></p> <p>The conclusion is that ADOT and HDR would sacrifice human health and safety to accomplish their goal of building the South Mountain Freeway and Truck Bypass, and would rather see people on the GRIC suffer and die from cancer than simply conduct an honest and objective NEPA process. Again, that appears to be a premeditated violation of the civil rights of the GRIC residents near the St. Johns JATAP monitoring site.</p>
48	<p>Other Air Toxics Point Sources Impacted by the South Mountain Freeway</p> <p>On top of the MSATs, there are also local point sources of these air toxics. In particular, the petroleum tank farm complex at 51st Avenue and Van Buren to about 57th Avenue and Van Buren receives transmix from California through a pipeline. There, the transmix is "refined" into diesel fuel and gasoline at this Phoenix location, and these fuels are also loaded into tanker trucks from large storage tanks sited there. The new South Mountain Freeway would be an immediately adjacent truck bypass route towards Casa Grande and the new train complex near Red Rock/Picacho Peak. The DEIS never mentions this, but the extra air pollution from this potential truck traffic from the petroleum tank farm complex in Phoenix using the South Mountain Freeway heading south should be investigated, examined, and quantified, as well the extra air pollution caused by the new truck traffic and the "refining" of more transmix and off-gassing of air toxics from loading and unloading of trucks that would also occur. This would also increase the releases of air toxics into the air into the study area and impact background levels of these air toxics. It is already established that the area has air toxics hot spots. The impacts of the South Mountain Freeway on MSAT levels in the affected areas near the freeway should be examined as a cumulative impact, an indirect impact, and a direct impact with this in mind also.</p>
49	<p>More Air Quality Issues: The Straw That Broke the Camel's Back</p> <p>The portion of Maricopa County that is characterized as the Phoenix metro area has had problems for decades meeting the air quality standards for particulate matter (PM) and other criteria pollutants. (Ozone levels are too high in the East Valley and Fountain Hills, for example.) There have been several exceedances of the standards for PM set by EPA under the authorities given the agency by the Clean Air Act (CAA). The problem has been so bad over the years that every possible delay and postponement allowed under the CAA to come up with a plan to meet regulatory levels of particulate matter have now been exhausted. So, currently, EPA is examining sanctions that include blocking a billion dollars in highway funds.</p>
50	<p>Any exceedances of the particulate matter standards of the NAAQS could bring sanctions under the enforcement provisions of the Clean Air Act, including the loss of a billion dollars in highway funds.. This could cost a billion dollars to start with, starting even before the freeway is completed, caused by the construction of the freeway: blasting,</p>

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48	Air Quality	As explained on pages 4-69 and 4-77 of the Draft and Final Environmental Impact Statements, respectively, the emissions analysis conducted for the project shows that future mobile source air toxics emissions will be lower than current levels. This analysis included projected truck traffic.
49	Air Quality	<p>Information on the attainment status of Maricopa County with the National Ambient Air Quality Standards begins on pages 4-59 and 4-68 of the Draft and Final Environmental Impact Statements, respectively.</p> <p>In May 2012, the Arizona Department of Environmental Quality submitted a revised Maricopa Association of Governments 2012 Five Percent Plan for the region. On July 20, 2012, the U.S. Environmental Protection Agency made an official finding that the Maricopa Association of Governments 2012 Five Percent Plan was administratively complete. This decision ended the sanctions clocks associated with Arizona's decision to withdraw the Maricopa Association of Governments 2007 Five Percent Plan. On February 6, 2014, the U.S. Environmental Protection Agency published a notice in the <i>Federal Register</i> proposing to approve the Maricopa Association of Governments 2012 <i>Five Percent Plan for Attainment of the PM-10 Standard</i> for the Maricopa County Nonattainment Area. In the same notice, the U.S. Environmental Protection Agency stated that it would concur with exceptional event (as a result of haboobs and dust storms) documentation prepared by the Arizona Department of Environmental Quality, which would give the region the 3 years of clean data needed for attainment of the particulate matter (PM₁₀) 24-hour standard. Finally on May 30, 2014, the U.S. Environmental Protection Agency approved the 2012 Five Percent Plan and found the area in attainment of the 24-hour particulate matter (PM₁₀) standard based on monitoring data for the years 2010 to 2012 (see page 4-72 of the Final Environmental Impact Statement for more information).</p> <p>According to the air quality analyses conducted for the proposed freeway, no violations of either the carbon monoxide or particulate matter (PM₁₀) standards were identified, even at worst-case locations along the project corridor. Thus, the carbon monoxide and particulate analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones. Therefore, no loss of federal funds would occur.</p>
50	Air Quality	40 Code of Federal Regulations § 93.111(c) was followed to conduct a qualitative analysis for particulate matter (PM ₁₀) for the proposed action. This analysis complied with National Environmental Policy Act requirements for the development of the Draft Environmental Impact Statement. In December 2010, the U.S. Environmental Protection Agency established transportation conformity guidance for performing quantitative particulate matter (PM _{2.5} and PM ₁₀) hot-spot analyses for transportation projects and established a 2-year grace period. U.S. Environmental Protection Agency conformity guidance continues to allow qualitative particulate matter (PM ₁₀) hot-spot conformity analyses for analyses that were started before or during the grace period and if the final environmental document for the project is issued no more than 3 years after issuance of the draft environmental document. A particulate matter (PM ₁₀) qualitative analysis was performed for this project because the initial air

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50	<p>excavating, moving massive amounts of dirt, etc. Enough of the dust could disperse and drift along the Salt River bed for the mile or so to the 43rd Avenue and Broadway air monitor, which is the monitoring site where the vast majority of the particulate matter exceedances have been recorded. That could trigger an exceedance of the particulate matter standards, which could cost literally, the billion dollars in highway funds. This should be examined as a cumulative impact, an indirect impact, and a direct impact.</p> <p>And the sand and gravel industry (including cement and asphalt operations) in Maricopa County is poised to take sand and gravel from the Salt River bed in the path of the freeway and use it for the freeway's construction. This would be an economic bonanza for the sand and gravel industry, as the distance from excavation to its construction use would be very insignificant. The production of all the asphalt and cement for the freeway would contribute enormous amounts of PM. Several of these sand, gravel, cement, and asphalt plants are located in the same vicinity of the monitor at 43rd Avenue and Broadway. The cumulative effect could certainly trigger PM exceedances at the monitor at 43rd Avenue and Broadway. The DEIS never mentions this, but it should be analyzed and modeled. This should further be examined as a cumulative impact, an indirect impact, and a direct impact.</p> <p>And after the freeway is built, there would likely still be ongoing exceedances.</p> <p>Almost every one of these PM exceedances have been detected at the air quality monitor at 43rd Avenue and Broadway Road, and others have occurred along the Salt River bed in previous years. There were even higher levels recorded at the air monitor at 22nd Avenue and Lower Buckeye Road, but this was moved to 43rd Avenue and Broadway years ago. It was moved from the 22nd Avenue and Lower Buckeye Road because there was going to be significant amounts of dust and PM put into the air when the Rio Salado Habitat Restoration was being built, so much so that more exceedances would have occurred at the 22nd Avenue and Lower Buckeye Road monitor. Also, there was a sand and gravel operation at 19th Avenue and the Salt River bed that had excess emissions of PM that triggered a penalty for it from EPA, so the monitor location was moved to protect the polluter.</p> <p>These exceedances resulted in EPA requiring a special Salt River SIP for the Salt River bed to address the excess PM. In preparing the Salt River SIP, there was extensive air monitoring and modeling. Those models do not include any freeway emissions, but as noted on pages 9 and 10, Roads & Trackout as accounted for in this Salt River SIP do not include any new air pollution from the South Mountain Freeway and Truck Bypass. Roads & Trackout also could be as much as 63.7% of the PM in the air on a calm day. The addition of particulate matter pollution from this freeway would be considerable, that should be modeled at a minimum, and quantified, and the entire calculations for the Salt River SIP would have to be redone including this new data to determine if the models show exceedances of the PM standard could occur. That would support the No-Build Option.</p> <p>http://www.epa.gov/region9/air/phoenixpm/pdf/SaltRiver-tech-support.pdf</p>

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50 (cont.)		<p>quality technical analysis report for the proposed action was produced in October 2005. The Arizona Department of Transportation and Federal Highway Administration have updated the qualitative analysis to a quantitative analysis for the Final Environmental Impact Statement to ensure that a state-of-the-art analysis is completed for the proposed project. The results of the analysis are summarized in the prologue to the Final Environmental Impact Statement (page xiii) and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement. The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones.</p> <p>Sand and gravel mining in the area is regulated by the Maricopa County Air Quality Department.</p> <p>The transportation conformity rule in 40 Code of Federal Regulations § 93.123(c)(5) states that hot-spot analyses are not required to consider construction-related activities that cause temporary increases in emissions. Temporary increases are defined as those that occur only during the construction phase and last 5 years or less at any individual site. Although the duration of the overall construction period of the entire 22- to 24-mile proposed action would be 5 to 6 years, according to page 3-60 of the Final Environmental Impact Statement, any particular portion of the Study Area would not see construction lasting for 5 to 6 years. Construction would be phased based on the factors appearing on page 3-59 of the Final Environmental Impact Statement. Any particular area of the project would not be expected to see construction activities beyond an approximate 2-year period; therefore, the construction effects described above would be temporary and would not require additional analysis.</p> <p>Secondary impacts to air quality are addressed in Table 4-54 on page 4-172 of the Final Environmental Impact Statement. Cumulative impacts to air quality are on page 4-179 of the Final Environmental Impact Statement.</p>

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50	<p>The placement of a freeway about a mile to a mile and a half upwind from a monitor that has had all these high levels seems foolish and short sighted. And of course, the impacts and risks of this are not even mentioned in the DEIS. This should be examined as a cumulative impact, an indirect impact, and a direct impact.</p> <p>The DEIS does not examine the dust that would be kicked up during the construction phase, when thousands of tons of dirt would be moved around upwind of the monitor. The proposed path of the South Mountain Freeway would take it over the Salt River bed. To construct the bridges would involve extensive earthmoving. Also, blasting South Mountain would also release enormous amounts of dust (PM), and the natural wind currents and prevailing wind patterns would push this PM toward the air monitor at 43rd Avenue and Broadway.</p> <p>The South Mountain Freeway could therefore be the most expensive freeway ever built. Not only the construction costs, and the \$20 million already spent on the bogus DEIS, but then there would be the loss of the billion dollars in highway funds. This is a gift that keeps on giving, or taking, as there would be subsequent billions lost through the years due to perennial PM exceedances.</p> <p>Increases in Particulate Matter Levels Correlate to Increased Mortality</p> <p>In <i>Fine Particulate Air Pollution and Mortality in 20 U.S. Cities, 1987–1994</i>, Jonathan M. Samet, M.D., Francesca Dominici, Ph.D., Frank C. Curriero, Ph.D., Ivan Coursac, M.S., and Scott L. Zeger, Ph.D., published in the New England Journal of Medicine in December 2000, [http://www.nejm.org/doi/full/10.1056/NEJM200012143432401] a direct correlation to increases in particulate matter in ambient air and death was determined. Phoenix and 19 other cities were studied, all with the same types of results. After taking into account potential confounding by other pollutants, the study found consistent evidence that the level of PM₁₀ is associated with the rate of death from all causes and from cardiovascular and respiratory illnesses. The estimated increase in the relative rate of death from all causes was 0.51 percent (95 percent posterior interval, 0.07 to 0.93 percent) for each increase in the PM₁₀ level of 10 µg per cubic meter. The estimated increase in the relative rate of death from cardiovascular and respiratory causes was 0.68 percent (95 percent posterior interval, 0.20 to 1.16 percent) for each increase in the PM₁₀ level of 10 µg per cubic meter.</p> <p>Yet the DEIS never mentions this well-known data. The increases in particulate matter pollution that will be caused by the South Mountain Freeway should be modeled and included in the environmental impact analysis.</p> <p>Traffic Congestion Issues at West I-10 Junction Adds to PM Issues</p> <p>The junction of the South Mountain Freeway on its west end with Interstate 10 may have been an idea conceived many years ago, but the traffic congestion that exists at the area between 59th and 51st Avenues on that freeway during morning and evening rush hours is already more than extreme. It is like a parking lot. Yet there is no mention in the DEIS</p>
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51	Air Quality	According to the air quality analyses conducted for the proposed freeway, no violations of either the carbon monoxide or particulate matter (PM ₁₀) standards were identified, even at worst-case locations along the project corridor. Thus, the carbon monoxide and particulate analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones. Therefore, no loss of federal funds would occur.
52	Air Quality	The Arizona Department of Transportation conducted a quantitative particulate matter (PM ₁₀) hot-spot analysis that is discussed on page 4-76 of the Final Environmental Impact Statement. The carbon monoxide and particulate matter (PM ₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones.
53	Traffic	<p>Construction of the proposed freeway would include widening along Interstate 10 to facilitate entrance and egress of vehicles between the two freeways. Additional information related to the Interstate 10 modifications can be found in Figure 3-26 on page 3-49 and Figure 3-29 on page 3-53 of the Final Environmental Impact Statement. The design of the connection to Interstate 10 and the widening along Interstate 10 were developed in accordance with the Federal Highway Administration’s Interstate System Access Informational Guide and have received an initial determination of operational and engineering acceptability from the Federal Highway Administration.</p> <p>Detailed microsimulation models were developed for each of the action alternatives as well as for the No-Action Alternative. The results of the analysis concluded that the action alternatives would not have adverse impacts on the traffic operational characteristics along Interstate 10 and would provide as good or better performance as the No-Action Alternative.</p> <p>An assessment of future traffic conditions with and without the proposed freeway is presented in the Final Environmental Impact Statement beginning on page 3-27.</p> <p>The traffic conditions presented in these sections are consistent with the environmental impacts analysis for elements such as air quality and noise, and the results of those analyses can be found in the respective sections of Chapter 4 of the Final Environmental Impact Statement. The air and noise analyses were updated for the Final Environmental Impact Statement (see sections beginning on pages 4-68 and 4-88, respectively). It is important to note that no substantial differences between the analyses for the Draft and Final Environmental Impact Statements resulted from the update.</p> <p>Secondary impacts to air quality are addressed in Table 4-54 on page 4-172 of the Final Environmental Impact Statement. Cumulative impacts to air quality are on page 4-179 of the Final Environmental Impact Statement.</p>

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	<p>of the cumulative impacts and effects of traffic congestion at that proposed junction, the effects on traffic flow in the vicinity of the interchange of the SMF and I-10 west. Without modeling that information, it cannot be determined if the freeway will cause more congestion or relieve it, but that step cannot wait until the design phase for that analysis because this step might/will show that the effects on traffic flow in the vicinity of the interchange of the SMF and I-10 west would be negative and traffic congestion worsened. This should be examined as a cumulative impact, an indirect impact, and a direct impact.</p>
54	<p>The overarching and consistent problem with the DEIS is that it utilizes such old and out-dated data from 2004-2007 for its analyses and conclusions that it is not viable or reliable. More recent data about traffic patterns, growth patterns, economic development patterns, etc. must be utilized to get correct projections to establish the need, if there even is one, for the freeway. There was an economic crisis in 2007 that caused major changes in the growth and economy of the Phoenix metropolitan area, and there has been some recovery, but many factors have changed substantially enough that the most up to date information has to be gathered and analyzed for the EIS.</p>
55	<p>A long line of vehicles sitting with engines idling while waiting to get on Interstate 10 at the junction with the SMF would also likely impact the air monitor at 43rd Avenue and Broadway. That could cost a billion dollars in sanctions more than once. What ADOT is doing is playing Russian Roulette with the highway money, with every day a potentially loaded with an air quality violation at the hot spot monitor at 43rd Avenue and Broadway. This should be examined as a cumulative impact, an indirect impact, and a direct impact.</p>
56	<p>There is much talk about the problems at the Broadway Curve, which is near the confluence of Highway 60, the 143, and Interstate 10. Let us be reminded that the Maricopa Association of Governments (MAG) and ADOT caused this problem through their shortsightedness and design problems. The planning of these agencies caused these traffic congestion nightmares. So now these same agencies, failed agencies, want to do this South Mountain Freeway. Will we be talking about the new junction in west Phoenix in the same way as the Broadway Curve? 100 trucks per hour and auto traffic trying to merge onto I-10 west during rush hour?</p>
57	<p>ADOT already completely ignored the recommendations of the original SMCAT, the group ADOT formed to skirt the proper NEPA scoping, in choosing the proposed alignment. The SMCAT, after months of study, had recommended that the SMF connect to the 101 on the west. So ADOT ignored even the recommendations of its own group and planned the SMF to connect with the I-10 at the currently proposed alignment.</p> <p>This leaves a large question: If ADOT did that at that time long ago, what is to stop it from completely ignoring the current SMCAT should SMCAT vote for a “NO BUILD” option?</p>

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54	Traffic	<p>The analyses in the Draft Environmental Impact Statement used socioeconomic and traffic projections at the regional analysis zone and traffic analysis zone levels. At the time of publication of the Draft Environmental Impact Statement, Census 2010-based socioeconomic data at the regional analysis zone and traffic analysis zone levels had not been adopted by the Maricopa Association of Governments and were not available to the project team. Therefore, the data used in the Draft Environmental Impact Statement were the most appropriate information available.</p> <p>The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future.</p>
55	Air Quality	<p>The Arizona Department of Transportation conducted a quantitative particulate matter (PM₁₀) hot-spot analysis that is discussed on page 4-76 of the Final Environmental Impact Statement. The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones.</p> <p>Secondary impacts to air quality are addressed in Table 4-54 on page 4-172 of the Final Environmental Impact Statement. Cumulative impacts to air quality are on page 4-179 of the Final Environmental Impact Statement.</p>
56	Traffic	<p>Construction of the proposed freeway would include widening along Interstate 10 to facilitate entrance and egress of vehicles between the two freeways. Additional information related to the Interstate 10 modifications can be found in Figure 3-26 on page 3-49 and Figure 3-29 on page 3-53 of the Final Environmental Impact Statement. The design of the connection to Interstate 10 and the widening along Interstate 10 were developed in accordance with the Federal Highway Administration’s Interstate System Access Informational Guide and have received an initial determination of operational and engineering acceptability from the Federal Highway Administration.</p>
57	Public Involvement	<p>The Arizona Department of Transportation conducted agency and public scoping process and has included agency and public input in the project development process. See Chapter 6 of the Final Environmental Impact Statement; agency scoping is presented beginning on page 6-2 and public involvement on page 6-6.</p> <p>The South Mountain Citizens Advisory Team and its engagement in the process was a part of the overall outreach program. The South Mountain Citizens Advisory Team’s own bylaws are clear in its advisory and partial role in the outreach process. While the South Mountain Citizens Advisory Team recommended the W101 Alternative, all stakeholders’ input was accounted for—including regional leaders, municipalities, members of the public, and members of the South Mountain Citizens Advisory Team—before identifying the W59 Alternative as the Preferred Alternative (see Final Environmental Impact Statement pages 3-65 and 3-68). The Final Environmental Impact Statement has detailed discussion regarding the relative merits and problems with the four action alternatives evaluated in the Western Section.</p>

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58	<p>The following are comments related to impacts to hazardous materials:</p> <p>DEIS Ignores Risks from Hazardous Materials Transportation Incidents Due to the South Mountain Freeway and Truck Bypass; WQARF Site</p> <p>The DEIS, starting on page 152, states, "AFFECTED ENVIRONMENT A hazardous materials evaluation for the construction and operation of the proposed freeway was conducted to determine whether:</p> <ul style="list-style-type: none">➤ contaminated soils would be present near potential hazardous materials sites➤ underground storage tanks would need removal or relocation because of freeway construction➤ wells and dry wells would be present, providing unintended conduits for preexisting or accidental releases from the construction process to groundwater supplies➤ during construction activities, workers could encounter soil contaminated with hazardous materials that had not previously been identified" <p>It doesn't mention at all the transportation of hazardous materials on the new freeway and their associated risks, or the fact that the area where the freeway would connect with I-10 West crosses a site that was identified in the 1980s as contaminated and added to the list of the state of Arizona's Water Quality Assurance Revolving Fund (WQARF), which is the state's equivalent of a Superfund Site. The site has known groundwater contamination and soil contamination.</p> <p>Risks from Hazardous Materials Transportation Incidents Due to the South Mountain Freeway and Truck Bypass</p> <p>But the introduction of hazardous materials and their associated risks into Ahwatukee Foothills by the proposed South Mountain Freeway and Truck Bypass and its truck traffic would be significant. There are no industries using and emitting toxic chemicals in Ahwatukee Foothills that have reporting requirements under either the Toxics Release Inventory of the Emergency Planning and Community Right to Know Act (EPCRA) or the reporting of fixed facility hazardous materials (chemical) inventories required under the emergency planning provisions of EPCA. The latter, Tier Two chemical inventory reports, are annually required, and are reported to the fire department of jurisdiction (Phoenix Fire Department), the local emergency planning committee (Maricopa County LEPC), and the state emergency response commission (AZSERC). (The requirement for retail gas stations to file Tier Two reports was removed many years ago as long as these stations are in compliance with their reporting under the regulations for underground storage tanks.)</p>

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58	Hazardous Materials	<p>Arizona highways, as are most highways across the United States, are open to all kinds of traffic, so long as the cargo being carried is in accordance with U.S. Department of Transportation regulations for the specific type of cargo. The Arizona Department of Transportation has a few locations in the state with hazardous cargo restrictions, but these restrictions are based on emergency response issues or roadway design limitations specific to that location. For example, the Interstate 10 Deck Park Tunnel has certain hazardous cargo transport restrictions because of the limited ability for emergency responders to address a hazardous materials incident in the tunnel. The South Mountain Freeway, if implemented, is expected to operate under the same rules as other similar facilities in the state; transport of hazardous cargo would be expected to be permissible (see text box on page 4-157 of the Final Environmental Impact Statement).</p> <p>The Arizona Department of Public Safety (which includes the State Highway Patrol) has primary responsibility for enforcing traffic laws. The Department of Public Safety also has primacy when calling in support for traffic accidents, including hazardous materials accidents (see text box on page 4-157 of the Final Environmental Impact Statement). The Arizona Department of Transportation maintains a list of contractors who provide emergency response services, as well as local municipalities whose fire and police departments operate in cooperation with the Department of Public Safety on incidents within their jurisdiction. Requirements for shippers are maintained by the Arizona Department of Transportation's Enforcement Compliance Division.</p> <p>The project team is aware of the Hazardous Materials Commodity Flow Studies that the Arizona State Emergency Response Commission maintains. These studies are used by emergency response planners (such as the Arizona State Emergency Response Commission statewide and the Maricopa County Local Emergency Planning Commission for Maricopa County) as one of the elements considered when developing Emergency Response Plans. If the plan is amended, it is made available to the Arizona Department of Transportation.</p> <p>In the event of an incident with a hazardous materials issue on a state or federal highway, the emergency responders contact the Arizona Department of Transportation's Traffic Operations Center to report the incident. The Traffic Operations Center then contacts the Arizona Department of Transportation's Safety and Risk Management group, who responds to the accident scene and assesses needs in concert with the Incident Commander from the responding agency with jurisdiction. If requested, the Arizona Department of Transportation can assist cleanup activities by engaging specialty subcontractors with whom the Arizona Department of Environmental Quality has contracts for such support. The Arizona Department of Transportation's Safety and Risk Management group's charge is primarily public health protection, with cleanup support being secondary.</p>

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58	<p>The Maricopa County LEPC and the AZSERC are the two emergency planning agencies tasked with developing and updating a comprehensive emergency response plan for Maricopa County and the state of Arizona, respectively. The plan, by statute, requires:</p> <p>"Each emergency plan shall include (but is not limited to) each of the following:</p> <p>(1) Identification of facilities subject to the requirements of this subchapter that are within the emergency planning district, identification of routes likely to be used for the transportation of substances on the list of extremely hazardous substances referred to in section 11002(a) of this title, and identification of additional facilities contributing or subjected to additional risk due to their proximity to facilities subject to the requirements of this subchapter, such as hospitals or natural gas facilities.</p> <p>(2) Methods and procedures to be followed by facility owners and operators and local emergency and medical personnel to respond to any release of such substances.</p> <p>(3) Designation of a community emergency coordinator and facility emergency coordinators, who shall make determinations necessary to implement the plan.</p> <p>(4) Procedures providing reliable, effective, and timely notification by the facility emergency coordinators and the community emergency coordinator to persons designated in the emergency plan, and to the public, that a release has occurred (consistent with the emergency notification requirements of section 11004 of this title).</p> <p>(5) Methods for determining the occurrence of a release, and the area or population likely to be affected by such release.</p> <p>(6) A description of emergency equipment and facilities in the community and at each facility in the community subject to the requirements of this subchapter, and an identification of the persons responsible for such equipment and facilities.</p> <p>(7) Evacuation plans, including provisions for a precautionary evacuation and alternative traffic routes.</p> <p>(8) Training programs, including schedules for training of local emergency response and medical personnel.</p> <p>(9) Methods and schedules for exercising the emergency plan.</p> <p>Due to the unique nature of Ahwatukee Foothills, which is a residential area, and not zoned for heavy industrial uses, few hazardous materials transportation issues and risks exist there because none of these chemicals, other than gasoline and diesel, are being transported into the area, other than incidentally adjacent on Interstate 10, which is east of the area. A catastrophic release of hazardous chemicals along the I-10 corridor would have only an indirect effect on Ahwatukee Foothills.</p>

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58 (cont.)		<p>The West Van Buren Water Quality Assurance Revolving Fund site was identified and considered during development of the Draft Environmental Impact Statement (see page 4-165 of the Final Environmental Impact Statement, and the Draft Initial Site Assessment prepared for the proposed project). These sites are primarily groundwater-impact sites, and groundwater is found at a depth of over 60 feet below the footprint of the Preferred Alternative. Given the separation distance between the adversely affected medium (groundwater) and the construction zone (near-surface in these locations), the project team determined that these sites would not pose a risk to construction or to the general public once the facility were completed. This assessment has been clarified in the Final Environmental Impact Statement on page 4-165.</p> <p>The efforts to address security concerns at the petroleum tank farm are discussed on page 3-24 of the Draft Environmental Impact Statement. These included numerous meetings with the Arizona Department of Homeland Security and others and included discussions of barriers to screen the facility from the traveling public and prevent attacks or crashes involving the facility. As noted in the Draft Environmental Impact Statement, these precautions were not necessary after the alignment was shifted from the W55 to the W59 Alternative.</p> <p>The road network in the Maricopa Association of Governments travel demand model includes the Interstate 8 and State Route 85 corridor. So, while the roads are not in the Study Area for the proposed action, traffic and trip distributions along the corridor are included in the traffic analysis for the proposed action. Any traffic that would shift from the Interstate 8 and State Route 85 corridor to the proposed action would be included in the vehicle mix considered in the analysis.</p> <p>A truck driver traveling from Tucson to Los Angeles and choosing to use Interstate 10 and the proposed freeway would travel 15 miles less than one choosing to use the designated truck bypass along Interstate 8 and State Route 85. Choosing to travel on the proposed action versus Interstate 8 and State Route 85 would not translate to any substantial travel-time benefits because the trip would require entering the Phoenix metropolitan area and be subject to potential delays and congestion. Therefore, it is expected that “true” through-truck traffic (not having to stop in the metropolitan area) would continue to use the faster, designated, and posted bypass system of Interstate 8 and State Route 85.</p> <p>The 2008 hazardous material report referenced in the comment was prepared to assist the Arizona Department of Transportation in refining its policies and process for determining hazardous materials routing in the state. It was a preliminary document and intended to form a basis of understanding about how other states’ planning processes address this issue. The report was not intended to provide specific recommendations for hazardous materials routing, but rather to provide the Arizona Department of Transportation with information to consider in making possible adjustments to its planning process. The recommendations of the report have been taken under advisement by the Arizona Department of Transportation.</p>

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58	<p>To determine the additional risks of hazardous materials transportation, the Maricopa County LEPC and the AZSERC would also need and utilize hazardous materials commodity flow studies to determine the types and amounts of hazardous materials being transported through or within the county and/or state to meet their respective planning requirements. Of course, the AZSERC does exactly that periodically, and the data and emergency planning is updated. But that data and the relevant analysis is absent in the DEIS.</p> <p>The planning for response to an incident involving the release into the environment of a hazardous material involves using Aerial Locations of Hazardous Atmospheres (ALOHA), RMP*Comp, and Computer Aided Management of Emergency Operations (CAMEO). All are USEPA approved and provided emergency planning screening tools. RMP*Comp is used to predict the effects of a release that would exceed the ALOHA model limit of six miles. The worst case scenario release for chlorine was the only hazardous material being transported on the highways that, in the event of a catastrophic release, would exceed the six-mile ALOHA modeling limit, so RMP*Comp is used to assess the radius of impact for the worst-case chlorine release. ALOHA, RMP*Comp, and CAMEO are all distributed by the USEPA and are software programs provided and periodically updated by USEPA to determine the distance from a release point there would be a danger to human health and safety. ALOHA can also calculate the levels of a released chemical that could infiltrate nearby buildings, the levels of those chemicals that will likely be in these buildings, and the time it would take for the released chemical(s) to reach their maximum concentration.</p> <p>As stated in the reports of the various hazardous materials commodity flow studies conducted in Arizona, ALOHA modeling already indicates, "a catastrophic release of gasoline from a tanker truck could cause areas up to 1.0 mile away to be affected at LOC 3 (a concentration where the general population could experience severe health effects and death) and areas as far as 3.1 miles away to be affected at LOC 1 (enough to cause discomfort in the general population). Credible and catastrophic releases of sulfuric acid would create an evacuation radius of 0.5 miles from the highway and railroad." (LOC means level of concern; LOCs range from 3 down to 1.)</p> <p>The petroleum tank farm complex at 51st Avenue and Van Buren to about 57th Avenue and Van Buren receives transmix from California through a pipeline. There, the transmix is "refined" into diesel fuel and gasoline at this Phoenix location. The new South Mountain Freeway would be an immediately adjacent truck bypass route towards Casa Grande and the new train complex near Red Rock/Picacho Peak. The DEIS never mentions this, but the extra potential truck traffic from the petroleum tank farm complex in Phoenix using the South Mountain Freeway heading south should be investigated, examined, and quantified, and the additional risks of a hazardous materials transportation incident involving diesel or gasoline should be also investigated, examined, and quantified. This should be examined as a cumulative impact, an indirect impact, and a direct impact.</p>

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58	<p>Ahwatukee Foothills already has some emergency planning needs due to the transportation of gasoline into and within the area. There should already be planning for an incident involving gasoline within a mile of current arterial traffic, including Pecos Road. Schools within a mile of Pecos should have an evacuation plan.</p> <p>The proposed South Mountain Freeway and Truck Bypass would only add exponentially to emergency planning needs and risks as more truck traffic of this chemical and others that are potentially more dangerous in the event of a catastrophic release would be transported immediately adjacent to schools, parks, shopping areas, and other vulnerable facilities in Ahwatukee Foothills. The freeway would be the sole source of these new risks from a hazardous materials incident, thus this would be a very significant impact directly caused by the freeway, and a full analysis of the risks and effects must be examined in the NEPA process.</p> <p>The data and calculations of risk and distance from certain chemicals carried on the highways are documented in the July 9, 2009, report, <i>The Hazardous Materials Commodity Flow Study Report I-19 Corridor from I-10 to Mexico Border, Arterial Highways and Railways, Pima and Santa Cruz Counties, Arizona</i>; the October 30, 2006 report, <i>Hazardous Materials Commodity Flow Study Report I-8 and I-10 Corridors, Arterial Highways and Railways, Yuma, Maricopa, Pinal, Pima and Cochise Counties, Arizona</i>; and the December 5, 2008 <i>Hazardous Material Commodity Flow Study I-10 Corridor from SR 85 to California</i> prepared for the AZSERC. Previous commodity flow study reports would show the same sorts of information.</p> <p>One piece of data that is missing is the Hazardous Materials Commodity Flow Study Report for the I-8 to SR 85 to I-10 route that was selected as a truck bypass around 2006. (Part of the idea of this particular truck bypass was to route truck traffic away from the Phoenix metro area as a measure to reduce particulate matter air pollution.) This also is part of the CANAMEX highway system that has been approved via treaties with Mexico and Canada, and this truck bypass has now been officially designated as the route of the CANAMEX.</p> <p>"SR 85 is the official truck bypass route around metropolitan Phoenix and has also been designated as part of the official CANAMEX corridor through the North American Free Trade Agreement (NAFTA). In addition to the importance of this route to the trucking industry, this corridor also provides access from the western portion of metropolitan Phoenix to the cities of Yuma and San Diego." [http://www.azdot.gov/highways/valley_freeways/SR85/Access.asp]</p> <p>"SR 85 and B-8 form a corridor that provides a major north-south connection between Interstate 10 west of the metropolitan area of Phoenix and I-8. The project limits of this access management study stretch approximately 36 miles and include the entire length of SR 85 from Gila Bend to I-10 and a portion of B-8 that connects SR 85 with I-8 on the east side of the town of Gila Bend. The route traverses through lands owned by the Bureau of Land Management, trust lands that are administered by the Arizona State Land Department, Arizona Game and Fish land (Robbins Butte State Wildlife Area), Maricopa</p>

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58	<p>to withhold this data, analysis, and discussion, which normally are indeed utilized in DEISs and the NEPA process. Frankly, that HDR obviously knew all of this, and therefore likely so did ADOT, in light of the SPR 64 report to ADOT, the omission and exclusion of this data from the DEIS may be a criminal act of negligence and/or fraud, akin to not warning people that they are entering an area where above ground nuclear testing could happen at any minute.</p> <p>From the beginning of the NEPA process regarding the South Mountain Freeway and Truck Bypass, Ahwatukee Foothills residents and others have consistently and vociferously raised concerns about the added risks to their community from the transportation of hazardous materials on the new South Mountain Freeway and Truck Bypass, and in doing so they have consistently voiced concerns regarding the additional problems with hazardous materials response in the affected area, as well as evacuation and shelter in place issues. Frankly, there is also a risk from the consequences of a hazardous materials transportation incident to the communities on the north side of the pass at South Mountain, and Laveen would be at a particularly heightened risk also. Therefore, the same types of impacts that threaten Ahwatukee Foothills would apply to these other communities, but at least these others have alternate escape routes that the community of Ahwatukee Foothills does not have.</p> <p>As of 2010, the 35.8 square-mile community of Ahwatukee Foothills has a population of 77,249. So if there is a catastrophic release from a 17-ton chlorine tanker along the Pecos Road alignment, almost all of these 77,249 would be at risk of death or severe injury. In Laveen, there are 35,502 residents who would be at a similar risk. There would also be risks to the residents of the Gila River Indian Community along the Pecos alignment. All of these above mentioned communities would be forever at risk of a very terrible, certain, and quick death from a chlorine release if this freeway gets built. All of these communities would have to be forever on hair trigger alert. They, as communities, would need periodic training and drills to protect them, as well as infrastructure in the form of siren systems and other alert systems, telephone ring down systems, and much more.</p> <p>We know that over a hundred trucks per hour would be the number at the beginning of the freeway's opening, just from localized traffic information, but when the I-8 to SR 85 to I-10 truck bypass is negated, there will be much more truck traffic. That number can be quantified, and that is something the DEIS should have done with the millions of dollars already wasted on it. But HDR and ADOT skirt that by claiming in the DEIS that that information is not known and the impacts are unclear. That is patently absurd; that is precisely the sort of data that is quite available, and must be examined, studied, and analyzed.</p> <p>Ahwatukee Foothills has its own unique layout and design, sometimes characterized as a large cul-de-sac, and in the event of a hazardous materials incident requiring shelter in place, or especially involving evacuation, there would be particular problems and risks. Due to the proximity of schools, parks, and other public facilities, as well as densely populated residential areas within areas of risk in the event of an incident involving the release into the environment of hazardous materials, there would have to be extensive</p>
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59	Hazardous Materials	The situation described in the comment, would be an indirect effect of the construction of a new freeway such as the proposed action. According to 40 Code of Federal Regulations 1508.8, indirect effects are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Reasonably foreseeable actions are those that are likely to occur or probable, rather than those that are merely possible.
60	Traffic	<p>The road network in the Maricopa Association of Governments travel demand model includes the Interstate 8 and State Route 85 corridor. So, while the roads are not in the Study Area for the proposed action, traffic and trip distributions along the corridor are included in the traffic analysis for the proposed action. Any traffic that would shift from the Interstate 8 and State Route 85 corridor to the proposed action would be included in the vehicle mix considered in the analysis.</p> <p>A truck driver traveling from Tucson to Los Angeles and choosing to use Interstate 10 and the proposed freeway would travel 15 miles less than one choosing to use the designated truck bypass along Interstate 8 and State Route 85. Choosing to travel on the proposed action versus Interstate 8 and State Route 85 would not translate to any substantial travel time benefits. Therefore, it is expected that “true” through-truck traffic (not having to stop in the metropolitan area) would continue to use the faster, designated, and posted bypass system of Interstate 8 and State Route 85.</p>
61	Hazardous Materials	<p>Arizona highways, as are most highways across the United States, are open to all kinds of traffic, so long as the cargo being carried is in accordance with U.S. Department of Transportation regulations for the specific type of cargo. The Arizona Department of Transportation has a few locations in the state with hazardous cargo restrictions, but these restrictions are based on emergency response issues or roadway design limitations specific to that location. For example, the Interstate 10 Deck Park Tunnel has certain hazardous cargo transport restrictions because of the limited ability for emergency responders to address a hazardous materials incident in the tunnel. The South Mountain Freeway, if implemented, is expected to operate under the same rules as other similar facilities in the state; transport of hazardous cargo would be expected to be permissible (see text box on page 4-157 of the Final Environmental Impact Statement).</p> <p>The Arizona Department of Public Safety (which includes the State Highway Patrol) has primary responsibility for enforcing traffic laws. The Department of Public Safety also has primacy when calling in support for traffic accidents, including hazardous materials accidents (see text box on page 4-157 of the Final Environmental Impact Statement). The Arizona Department of Transportation maintains a list of contractors who provide emergency response services, as well as local municipalities whose fire and police departments operate in cooperation with the Department of Public Safety on incidents within their jurisdiction. Requirements for shippers are maintained by the Arizona Department of Transportation’s Enforcement Compliance Division.</p>

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	<p>planning and drills for shelter in place and evacuation, an assessment of the types and amounts of hazardous materials traffic and the chemicals involved, and much more. Siren systems and appropriate training and drills would have to be instituted to mitigate the additional risks.</p>
62	<p>In addition to this, the fact that the proposed freeway would eliminate the exits from the community at 32nd Street and Pecos would only exacerbate an already difficult position that this community would be in if there were an evacuation or the need for a response to a catastrophic hazardous materials incident. Regular traffic is already voluminous at that intersection:</p> <ul style="list-style-type: none">• Pecos (west approach) - Total 22,313 veh/day (2012 count) including 11,727 westbound and 10,586 eastbound volumes.• Pecos (east approach) - Total 28,178 veh/day (2012 count) including 14,331 westbound and 13,847 eastbound volumes• 32nd Street (north approach) - Total 7,807 veh/day (2011 count) including 3,761 northbound and 4,406 southbound volumes. <p>With that access to Pecos Road being removed by the freeway, all of that traffic would have to find another way out and further clog and congest other exit routes. Yet there is no mention or analysis of these issues in the DEIS.</p>
63	<p>What the DEIS fails to mention and analyze about the risks from a catastrophic release of hazardous chemicals due to a transportation incident MUST be fully reviewed and analyzed in the EIS. In the matter of evacuation of Ahwatukee Foothills, the GRIC community near the freeway, and Laveen, a detailed traffic flow analysis and evacuation plan utilizing street maps of Ahwatukee Foothills must be prepared to determine if it is feasible at all, especially in the case of Ahwatukee Foothills. If the analysis shows that the community of Ahwatukee cannot be evacuated within 5-10 minutes, then the No Build option is the only logical and humane result. The caveat of evacuation within 5-10 minutes is due to the very real threat to the community due to a catastrophic release of chlorine gas from a 17-ton tanker truck during a transportation incident.</p> <p>The October 30, 2006 report, <i>Hazardous Materials Commodity Flow Study Report I-8 and I-10 Corridors, Arterial Highways and Railways, Yuma, Maricopa, Pinal, Pima and Cochise Counties, Arizona</i>, also mentions the risk from a release of chlorine gas and the risks of a catastrophic release during a transportation incident. As stated, RMP*Comp is an USEPA approved emergency planning screening tool used when ALOHA predicts the effects of a release would exceed the ALOHA model limit of six miles. The worst case scenario release for chlorine was the only material to exceed the six-mile ALOHA limit.</p> <p>Since Ahwatukee Foothills is not six miles wide from Pecos Road to South Mountain, it is easy to conclude that, in the event of a catastrophic release of chlorine from a 17-ton tanker of chlorine gas, all of Ahwatukee Foothills would have to either evacuate or shelter in place. Further, an ALOHA modeling indicates that buildings within two miles of the point where the chlorine release occurred would have high enough levels of chlorine gas infiltrate into them to become lethal, which means that shelter in place strategies would not work. The only option would be evacuation, but as chlorine gas</p>

Code	Issue	Response
61 (cont.)		<p>In the event of an incident with a hazardous materials issue on a state or federal highway, the emergency responders contact the Arizona Department of Transportation’s Traffic Operations Center to report the incident. The Traffic Operations Center then contacts the Arizona Department of Transportation’s Safety and Risk Management group, who responds to the accident scene and assesses needs in concert with the Incident Commander from the responding agency with jurisdiction. If requested, the Arizona Department of Transportation can assist cleanup activities by engaging specialty subcontractors with whom the Arizona Department of Environmental Quality has contracts for such support. The Arizona Department of Transportation’s Safety and Risk Management group’s charge is primarily public health protection, with cleanup support being secondary</p>
62	Traffic	<p>The determination to not include an interchange at 32nd Street was made in coordination with the City of Phoenix (see Figure 3-8 on page 3-15 of the Draft Environmental Impact Statement). The interchange was eliminated based on undesirable residential displacements and cost.</p> <p>In 2006, the City of Phoenix conducted a traffic circulation study to evaluate the impacts of the proposed freeway on the local street system, including the shift of access to Foothills Reserve and Calabrea from Pecos Road to Chandler Boulevard. The City study found no adverse effects on the local street system from the freeway (see Appendix 3-1 in the Final Environmental Impact Statement).</p> <p>In the event of an incident with a hazardous materials issue on a state or federal highway, the emergency responders contact the Arizona Department of Transportation’s Traffic Operations Center to report the incident. The Traffic Operations Center then contacts the Arizona Department of Transportation’s Safety and Risk Management group, who responds to the accident scene and assesses needs in concert with the Incident Commander from the responding agency with jurisdiction. If requested, the Arizona Department of Transportation can assist cleanup activities by engaging specialty subcontractors with whom the Arizona Department of Environmental Quality has contracts for such support. The Arizona Department of Transportation’s Safety and Risk Management group’s charge is primarily public health protection, with cleanup support being secondary.</p>
63	Hazardous Materials	<p>There are no requirements in 23 Code of Federal Regulations 771 Environmental Impact and Related Procedures or in the Federal Highway Administration Technical Advisory T 6640.8A Guidance for Preparing and Processing Environmental and Section 4(f) Documents to address releases of hazardous chemicals due to a transportation incident in National Environmental Policy Act documents for transportation projects like the proposed action. As discussed above, reasonably foreseeable actions are those that are likely to occur or probable, rather than those that are merely possible.</p> <p>If the proposed action is the Selected Alternative in a record of decision, planning for emergency situations would be initiated. If the plan is amended, it is made available to the Arizona Department of Transportation.</p>

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63	<p>flows rapidly at ground level because it is heavier than air, it is unlikely that people would survive long enough to evacuate. Depending on the size of the hole or the rupture of the tanker of chlorine, the tanker could completely empty in a minute or so. And these chlorine truck tankers are quite vulnerable to bullets and other physical trauma.</p> <p>For an objective examination of issues related to a catastrophic release from a chlorine tanker truck, see <i>Mathematical Modeling and Decision Analysis for Terrorism Defense: Assessing Chlorine Truck Attack Consequence and Countermeasure Cost Effectiveness</i>, Anthony Michael Barrett.</p> <p>It notes:</p> <p>"Adapting our modeling system to ruptures emptying a tank via flashing two-phase flow through an orifice [80], forming horizontal jets, indicates that such releases could result in approximately the same number of fatalities as an instantaneous release, if such a release takes 10 minutes or less. " page 42</p> <p>"People in vehicles may be as well off staying where they are, turning off the air-supply fan and sealing the vents, as heading into a nearby building. It may also be dangerous for them to try to drive away, since they may unintentionally drive into higher-concentration areas."</p> <p>"Without fast and effective defense response, release of 17 tons of chlorine from a tank truck in a generic urban area with 2.5 m/s wind and Pasquill stability class F, could result in approximately 4000 (half within ~10 minutes) to 30,000 fatalities (half within ~20 minutes), depending on dose-response model."</p> <p>" Rapid release of the entire cargo of 17 tons of chlorine from one tank truck could result in the formation of a toxic cloud stretching over tens of city blocks within a few minutes. Predicted fatalities are strongly sensitive to wind speed, atmospheric stability class, amount of chlorine released, and dose-response model parameters. Without defensive response, under highest-fatality weather conditions, using the Withers and Lees dose-response model, we estimate approximately 8000 fatal exposures, with 50% occurring within 15 minutes. With other dose-response models, under the same weather conditions, no-defense-response fatality estimates range from approximately 4000 to approximately 30,000 fatalities. Total fatalities under median-fatality weather conditions are approximately 10-20% of total fatalities under highest-fatality weather conditions, depending on dose-response model."</p> <p>"If chlorine is released outdoors, exposure risk is much higher for people outdoors than indoors. We assumed that people in the area were 7% outdoors and 93% indoors, but the fraction of estimated fatalities that are people outdoors in the no-response case, under highest-fatality weather conditions, ranges from 60-90%. Most fatalities indoors are people on the first few floors, so it greatly can reduce hazard for those indoors if air intakes are at roof level instead of on each floor. Changes in mass of chlorine released result in roughly proportional increases in outdoor fatalities, though disproportionately high increases in indoor fatalities, probably because larger-mass releases lead to larger</p>

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61	<p>and longer-lasting clouds. Changes in some parameters, such as indoor and outdoor population densities, would produce proportional changes in fatality estimates in the no-defense-response case. If implemented quickly and widely enough, rapid public responses such as sheltering-in-place and evacuation could significantly reduce fatalities from a chlorine attack. However, practical response times may be significantly longer, with the result that the reduction in mortality would be small.</p> <p>Under highest-fatality weather conditions, with the Withers and Lees dose-response model, to achieve a 50% reduction in fatalities for people outdoors at the time of attack by taking shelter in nearby buildings, people would need to move indoors approximately ten minutes after a chlorine release. However, estimated delays from chlorine exposure effectively add four to seven minutes to ingress time, increasing fatalities by ~1000. To achieve a 50% reduction in fatalities for people indoors at the time of the attack, building air intakes would need to be shut approximately two to six minutes after the attack depending on building air exchange rates before and after shutdown, though later 45 shutdowns can increase fatalities by trapping poison inside. To achieve a 50% reduction in estimated outdoor fatalities, evacuation crosswind at 50 m/min would need to begin after approximately 12 minutes if chlorine exposure does not cause movement delays.</p> <p>Achieving a 50% reduction in estimated outdoor fatalities with only a security perimeter would require a distance between the chlorine release and people outdoors of approximately 1200 m. For mitigation measure cases, trends in sensitivities to weather conditions and dose-response model are generally similar to those for no-defense-response cases.</p> <p>Fatality estimates for the models and scenario we consider in this chapter are much higher than the numbers of fatalities in the 2006-2007 chlorine attacks in Iraq. When our estimates are adjusted to correspond to the conditions in those attacks, as estimated from publicly available information, we obtain fatality predictions roughly similar to, but often higher than, the numbers actually seen in Iraq. We expect that our models and assumptions are biased towards overestimating fatalities. We suggest readers use caution in applying our results, and place less importance on specific values of our model predictions than on trends in those prediction (pages 44-46)</p> <p>[http://research.create.usc.edu/cgi/viewcontent.cgi?article=1010&context=nonpublished_reports]</p> <p>Chlorine gas in even small concentrations is harmful. A person encountering chlorine gas will have a hard time seeing as the chlorine reacts with the moisture in the eye to create hydrochloric acid. The eyes will tear up and make seeing very difficult. At high enough levels, severe scarring and blindness will result.</p> <p>The same formation of hydrochloric acid will occur in the throat and lungs. People won't be able to take a deep breath or breathe without choking, as mucous membranes in the respiratory system will be quite irritated and will start to weep. Lungs will blister, and the ability to pass oxygen to the blood through the lung membranes will be compromised</p>

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63	<p>immediately. Walking, much less running, will be very difficult. A half blinded, gasping person who cannot take a deep breath is not going to be a match for a cloud of chlorine, and any evacuation, or rescue on any scale, after the arrival of the chlorine gas will be virtually impossible. Handicapped and elderly people, as well as children, would be at a particular disadvantage. People outside would have no place to go to for sheltering in place. Shelter in place strategies, i.e. having people shelter in a building, stop ventilation systems, and block up and seal all air flow, will have to be successful before the chlorine gas arrives. Otherwise, those sheltering will bottle themselves up with a harmful gas.</p> <p>ALOHA modeling indicates that certainly all buildings within a mile of the chlorine release from a 17-ton tanker truck would have such high levels of chlorine gas infiltrate into them that most people there would die, or be very severely injured. Some models put that circle of assured death at closer to two miles away. There are schools and residential areas on the north side of the Pecos Road alignment within a mile of the proposed South Mountain Freeway and Truck Bypass, and many more within two miles of the freeway alignment. There would be thousands of people at an extreme risk.</p>
64	<p>The prevailing winds push across GRIC land toward the north, toward South Mountain, and also to the west through the 51st Avenue pass. Chlorine fumes from an incident on the Pecos Road alignment will certainly be most likely to blow the cloud into all of Ahwatukee Foothills, then on to the GRIC at 51st Avenue, then into Laveen.</p>
63	<p>ALOHA modeling has a six mile limit to its calculation, but in this case, that limit is more than Ahwatukee Foothills is wide, north to south. All 77,000+ people there would be at a severe risk with no way out.</p>
64	<p>There is a pass at 51st Avenue where the proposed truck bypass/freeway is planned. The prevailing winds do push through this from the south, mostly, and there is a westerly breeze that eventually pushes the air from Ahwatukee Foothills to and through that pass. After the chlorine cloud takes out Ahwatukee Foothills, it will drift through the pass, killing and harming any people on the GRIC in its path who have not evacuated or sheltered already. Then it would seep towards Laveen, where it would also wreak havoc. Laveen residents have many options to evacuate, roads east and west, but there is still lack of easy travel there. The time before the chlorine cloud got there might give Laveen area residents and visitors more time, and the dissipation of the chlorine by the time it reached that distance from the source, several miles, could better enable shelter in place strategies.</p>
63	<p>However, if the chlorine incident happened at the 51st Avenue pass and/or Laveen, the one to two mile kill zone and six+ miles of harm would apply there with just a few minutes to take appropriate action to evacuate or shelter in place.</p> <p>All these communities would be forever just minutes from annihilation. All these communities would need extensive education and drills, special planning, and additional resources, such as telephone ring down systems, siren and flashing light warning systems, and other notification strategies.</p>

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64	Air Quality	<p>According to the Arizona Department of Transportation, 2013, <i>Air Quality Assessment South Mountain Freeway 202L Draft Report</i>, review of wind data from the Gila River Indian Community monitoring site at St. Johns suggests that during the morning hours and associated with mountain-drainage air flows and stable atmospheric conditions, wind flows are from the southeast and follow the Gila River channel to the north. Locations to the east of St. Johns experience flow from the east to the lower elevations along the Gila River. During the warmer hours' improved mixing, flows typically follow the river channel and come from the north and northwest.</p> <p>Likewise, during a 1-month-long meteorological monitoring period (November 20, 2006 through December 21, 2006) at Pecos Road and 40th Street and a second 1-month-long monitoring period at Pecos Road and 24th and 40th streets (April 19, 2007 through May 21, 2007), winds during the morning hours typically were from the northeast. During the warmer hours, and with improved mixing, winds typically were from the west.</p>

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63	<p>There is the additional problem of handling the people outdoors at parks, bicycling, hiking, shopping, and other activities if such an incident occurred. Strategies would have to be determined well in advance. Law enforcement personnel and emergency responders would need to be trained, drilled, equipped properly, and otherwise prepared for this scenario. If the 17-ton tanker of chlorine empties in minutes, there won't be much the emergency responders can do to stop the leak, but patch kits are available for that purpose. A rupture or hole may be too large to patch, and that size of opening would vent all the chlorine anyway by the time any responders arrived. With such limited freeway access and egress, that becomes a response hindrance also.</p>
65	<p>One responder strategy would be to try to "knock down" the cloud of chlorine with water. To prepare for that, the freeway would have to have a hydrant system with enormous amounts of water and water pressure, as no fire truck would have enough water to last very long. All that water and chlorine would make plenty of hydrochloric acid. The hydrochloric acid would eat away and decay the responding vehicles and equipment, the concrete on the freeway, its culverts, degrade the asphalt pavement, and ruin any metal cables and metal where the acid solution washed to. The freeway would have to be designed so that such an incident would not also destroy it.</p>
63	<p>There would also be residual effects. The January 2005 chlorine disaster in Graniteville, South Carolina illustrates some of these. Following the chlorine disaster, Avondale Mills (textile company) officials had spent more than \$140 million on cleaning, repairs and damage mitigation from the textile mills machinery that was corroded so severely by the chlorine gas that it had to be replaced, only to find that new equipment brought to the plant quickly corroded because chlorine was still present and reacting with other agents.</p> <p>That the corrosive effects of the chlorine from such a large release would last so long needs to be taken into account into assessing the costs associated with such an incident. The chlorine reacted with moisture to form hydrochloric acid, but even after time, one would expect that this would diminish. In assessing the damages from a large-scale chlorine release, emergency responders and emergency planning agencies should look for this lasting effect. The corrosive effects could harm pavement, concrete, industrial infrastructure, and even residential structures and the electrical wiring. A much more detailed decontamination, including pH samplings, should be undertaken in the recovery phase of operations to prevent such devastation.</p> <p>Chlorine gas also has other effects on the infrastructure and electronics. The dryness of the Phoenix area might somewhat mitigate the tendency of airborne chlorine gas to form hydrochloric acid with moisture, but the chlorine and the moisture in the air form weak acids that can affect cell phones, car ignitions, and a host of other devices. Arizona has a moist season, monsoon in the summer, and it has normal rainfall events, and if there is sufficient moisture in the air, hydrochloric acid will form. Dry acid deposition from a chlorine disaster would also be a lingering source of problems.</p>

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65	Hazardous Materials	<p>According to the Arizona Department of Transportation’s 2012 Roadway Design Guide, “Within the highway design philosophy and the Arizona Department of Transportation project team approach to project development, the roadway designer has the responsibility to contribute the most desirable design parameters consistent with safety, service, environment, and cost effectiveness and to apply these parameters with sound engineering judgment.” In general, to limit costs but still protect public safety, roads are not designed for the worst possible incident, but they are designed to accommodate most foreseeable incidents with moderate damage. This is similar to the National Environmental Policy Act’s direction that an environmental impact statement must discuss reasonably foreseeable actions. These are actions that are likely to occur or probable, rather than those that are merely possible.</p>

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66	<p>NEPA requires examination of cultural, social, and economic impacts, and the new hazardous materials traffic and risks caused by the South Mountain Freeway and Truck Bypass would certainly affect all of these topic areas.</p>
67	<p>Despite all of this, there is nothing in the DEIS that even mentions the hazardous materials transportation and risks issue! This raises many issues, from the \$20+ million spent on this deficient study, to the scoping for the DEIS that was designed to restrict citizen input rather than allowing and encouraging it, to the blatant ignoring of actual, well documented statements of these concerns about the risks from hazardous materials transportation incidents by citizens participating in this particular NEPA process.</p> <p>But it is evident that ADOT knew that there would be hazardous materials being transported on this proposed highway. A tunnel through South Mountain was rejected as an option by ADOT because that would prevent placarded traffic (traffic with hazardous materials) from traveling on the freeway. [Chapter five, page 20. “The inclusion of a tunnel could result in hazardous materials restrictions along the entire proposed action. Therefore, hazardous cargo carriers would have to continue to use existing routes.”]</p> <p>DEIS Ignores WQARF Site</p> <p>Hazardous Materials has been mostly limited in the DEIS to a discussion of hazardous materials that might be encountered in the soils during construction. Yet, despite this alleged concern, the fact that the proposed path of the freeway crosses contaminated property near Interstate 10 near 55th Avenue is neither mentioned nor examined, much less the financial liability the taxpayers might be assuming by purchasing the contaminated property. That would certainly be an enormous economic impact. Since the 1980s, there has been well-documented groundwater contamination in the area around 51st avenue and Van Buren to 59th Avenue and Van Buren, enough so that it was added to the list of the state of Arizona's Water Quality Assurance Revolving Fund (WQARF), which is the state's equivalent of a Superfund Site.</p> <p>From: http://www.azdeq.gov/environ/waste/sps/download/phoenix/wvb.pdf</p> <p>"Site History: 1987: The November 13 Decision Record created the Van Buren Tank Farm WQARF area. The amended decision record dated December 11 changed the name to the West Van Buren Area."</p> <p>"The West Van Buren WQARF (site) is located in the western portion of Phoenix, Arizona. The site is bounded approximately by Interstate 10 to the north, 7th Avenue to the east, Buckeye Road to the south and 75th Avenue to the west. In addition, a finger shaped plume exists between 7th Avenue and 27th Avenue between Buckeye Road and Lower Buckeye Road." (http://www.azdeq.gov/environ/waste/sps/download/phoenix/wvb.pdf)</p> <p>"Contaminants:</p>

Code	Issue	Response
66	Hazardous Materials	<p>According to 46 <i>Federal Register</i> 18026 (March 23, 1981), the environmental impact statement must discuss reasonably foreseeable actions. These are actions that are likely to occur or probable, rather than those that are merely possible.</p> <p>Arizona highways, as are most highways across the United States, are open to all kinds of traffic, so long as the cargo being carried is in accordance with U.S. Department of Transportation regulations for the specific type of cargo. The Arizona Department of Transportation has a few locations in the state with hazardous cargo restrictions, but these restrictions are based on emergency response issues or roadway design limitations specific to that location. For example, the Interstate 10 Deck Park Tunnel has certain hazardous cargo transport restrictions because of the limited ability for emergency responders to address a hazardous materials incident in the tunnel. The South Mountain Freeway, if implemented, is expected to operate under the same rules as other similar facilities in the state; transport of hazardous cargo would be expected to be permissible (see text box on page 4-157 of the Final Environmental Impact Statement).</p>
67	Hazardous Materials	<p>If the proposed action is the Selected Alternative in the record of decision, planning for emergency situations would be initiated. If the plan is amended, it is made available to the Arizona Department of Transportation.</p> <p>Hazardous materials transport is described on page 4-157 of the Final Environmental Impact Statement. Arizona highways, as are most highways across the United States, are open to all kinds of traffic, so long as the cargo being carried is in accordance with U.S. Department of Transportation regulations for the specific type of cargo. The Arizona Department of Transportation has a few locations in the state with hazardous cargo restrictions, but these restrictions are based on emergency response issues or roadway design limitations specific to that location. For example, the Interstate 10 Deck Park Tunnel has certain hazardous cargo transport restrictions because of the limited ability for emergency responders to address a hazardous materials incident in the tunnel. The South Mountain Freeway, if implemented, is expected to operate under the same rules as other similar facilities in the state; transport of hazardous cargo would be expected to be permissible (see text box on page 4-157 of the Final Environmental Impact Statement).</p>
	Public Involvement	<p>The effort represents the Arizona Department of Transportation’s most extensive public involvement program undertaken in the Phoenix area leading up to publication of the Draft Environmental Impact Statement in April 2013. Examples, such as holding over 200 presentations were made to neighborhood groups, homeowners’ associations, chambers of commerce, village planning committees, trade associations, and other interested parties, can be found in text beginning on page 6-6 of the Final Environmental Impact Statement. The purposes of the outreach were in accordance with requirements established under the National Environmental Policy Act and include: obtain public input to assist in developing a well planned, researched, and defensible environmental impact statement for the proposed action; provide ongoing information on the study and obtain input from the primary stakeholders and broader public; identify key issues and concerns of the public and ensure that these are appropriately considered during the process; develop and implement a process that maintains open and continuing communications among the public, Arizona Department of Transportation, Federal Highway Administration, and the project team; and use multiple communication tools to effectively engage all population segments, thereby ensuring equal access to the environmental impact statement process.</p>

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	<p>NEPA requires examination of cultural, social, and economic impacts, and the new hazardous materials traffic and risks caused by the South Mountain Freeway and Truck Bypass would certainly affect all of these topic areas.</p> <p>Despite all of this, there is nothing in the DEIS that even mentions the hazardous materials transportation and risks issue! This raises many issues, from the \$20+ million spent on this deficient study, to the scoping for the DEIS that was designed to restrict citizen input rather than allowing and encouraging it, to the blatant ignoring of actual, well documented statements of these concerns about the risks from hazardous materials transportation incidents by citizens participating in this particular NEPA process.</p> <p>But it is evident that ADOT knew that there would be hazardous materials being transported on this proposed highway. A tunnel through South Mountain was rejected as an option by ADOT because that would prevent placarded traffic (traffic with hazardous materials) from traveling on the freeway. [Chapter five, page 20. "The inclusion of a tunnel could result in hazardous materials restrictions along the entire proposed action. Therefore, hazardous cargo carriers would have to continue to use existing routes."]</p> <p>68</p> <p>69</p> <p>DEIS Ignores WQARF Site</p> <p>Hazardous Materials has been mostly limited in the DEIS to a discussion of hazardous materials that might be encountered in the soils during construction. Yet, despite this alleged concern, the fact that the proposed path of the freeway crosses contaminated property near Interstate 10 near 55th Avenue is neither mentioned nor examined, much less the financial liability the taxpayers might be assuming by purchasing the contaminated property. That would certainly be an enormous economic impact. Since the 1980s, there has been well-documented groundwater contamination in the area around 51st avenue and Van Buren to 59th Avenue and Van Buren, enough so that it was added to the list of the state of Arizona's Water Quality Assurance Revolving Fund (WQARF), which is the state's equivalent of a Superfund Site.</p> <p>From: http://www.azdeq.gov/environ/waste/sps/download/phoenix/wvb.pdf</p> <p>"Site History: 1987: The November 13 Decision Record created the Van Buren Tank Farm WQARF area. The amended decision record dated December 11 changed the name to the West Van Buren Area."</p> <p>"The West Van Buren WQARF (site) is located in the western portion of Phoenix, Arizona. The site is bounded approximately by Interstate 10 to the north, 7th Avenue to the east, Buckeye Road to the south and 75th Avenue to the west. In addition, a finger shaped plume exists between 7th Avenue and 27th Avenue between Buckeye Road and Lower Buckeye Road." (http://www.azdeq.gov/environ/waste/sps/download/phoenix/wvb.pdf)</p> <p>"Contaminants:</p>

Code	Issue	Response
68	Hazardous Materials	<p>As disclosed on page 4-157 of the Final Environmental Impact Statement, the Arizona Department of Transportation has a few locations in the state with hazardous cargo restrictions, but these restrictions are based on emergency response issues or roadway design limitations specific to that location. For example, the Interstate 10 Deck Park Tunnel has certain hazardous cargo transport restrictions because of the limited ability for emergency responders to address a hazardous materials incident in the tunnel.</p> <p>The comment infers the only reason for elimination of tunnels as a reasonable option was due to the potential to restrict hazardous materials transport. On the referenced page of the Draft Environmental Impact Statement, there are seven other reasons associated with design, operational, maintenance, costs and impacts cited for the elimination of the tunnels as a reasonable option.</p> <p>Arizona highways, as are most highways across the United States, are open to all kinds of traffic, so long as the cargo being carried is in accordance with U.S. Department of Transportation regulations for the specific type of cargo. The South Mountain Freeway, if implemented, is expected to operate under the same rules as other similar facilities in the state; transport of hazardous cargo would be expected to be permissible.</p>
69	Hazardous Materials	<p>Analysis of hazardous materials followed state-of-the-practice methods as reviewed by the U.S. Environmental Protection Agency and as used in a multitude of environmental studies for transportation projects across the country. Methods and results are presented on page 4-152 of the Draft Environmental Impact Statement. In summary, during the environmental impact statement process, properties potentially having hazardous waste on site are identified. These sites are considered during the corridor selection process and are ranked according to the likelihood of further assessment or potential cleanup activities being needed. The risk ranking method is used to inform the design team about which properties would likely need further assessment during the property acquisition phase of the project if an action alternative were to become the Selected Alternative. No sites were identified as "high risk." Some sites were identified as "high priority." High-priority sites are those with high potential for releasing hazardous materials to the soil or groundwater, or those that have a recorded release issue. Examples of high-priority sites include current service stations, bulk fueling terminals, sites listed in the environmental database, or a known release that has not been remediated. (See page 4-152 of the Draft Environmental Impact Statement.)</p> <p>The corridor analysis revealed sites that would need further assessment during the property acquisition phase of the project, if an action alternative were to become the Selected Alternative. The Arizona Department of Transportation employs a phased approach to site assessment that allows time for cleanup of any sites found to have hazardous waste issues. The project team concluded from the level of analysis conducted during the environmental impact statement process that the types of sites likely to be acquired contain common hazardous waste issues like underground storage tanks, asbestos and lead paint in buildings, and other commonly found issues (see page 4-153 of the Draft Environmental Impact Statement). The Arizona Department of Transportation maintains a process for addressing these issues in accordance with all applicable environmental laws and regulations.</p>

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69	<p>The current contaminants of concern in groundwater include tetrachloroethene (PCE),trichloroethene (TCE), 1,1-dichloroethane (1,1-DCA), cis-1,2-dichloroethene (cis-1,2-DCE), 1,1-dichloroethene(1,1-DCE) and chromium. Contaminants of concern at the site may change as new data become available."</p> <p>By purchasing this contaminated land for the freeway, the state of Arizona would assume the liability for the clean up of these contaminants, along with the liability for adverse health impacts suffered by workers in the area. This would be an enormous economic impact. This is a type of corporate welfare, as it would remove the liability costs from the various polluters and current property owners that have ground and groundwater pollution issues and transfer it to the people of Arizona. This would be a huge economic impact. This should be examined as a cumulative impact, an indirect impact, a direct impact, and an economic impact.</p>
70	<p>There are other issues and other data not included in the DEIS that relate to truck traffic and hazardous materials. What would be the effect on traffic flow and congestion in the event of a hazardous materials incident of any type or volume?</p> <p>The following are comments related to impacts to environmental justice:</p> <p>The DEIS section titled TITLE VI AND ENVIRONMENTAL JUSTICE [Section 4(f) Evaluation Chapter 4 Affected Environment, Environmental Consequences, and Mitigation 4-29] starts with:</p> <p>"The U.S. Environmental Protection Agency (EPA) and FHWA define environmental justice as “fair treatment for people of all races, cultures, and incomes, regarding the development of environmental laws, regulations, and policies.” Environmental justice principles and procedures are followed to improve all levels of transportation decision making. Title VI prohibits discrimination on the basis of race, color, or national origin. The 1994 Executive Order12898 on environmental justice addresses minority and low-income populations. The rights of women, the elderly, and the disabled are protected under related statutes. This Presidential Executive Order and other related statutes fall under the umbrella of Title VI. The U.S. Department of Transportation Order 5610.2(a) requires that environmental justice principles be considered in all the Department’s programs, policies, and activities. Three fundamental environmental justice principles apply to the transportation project development process:</p> <ul style="list-style-type: none">➤ to avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations➤ to ensure the full and fair participation by all potentially affected communities in the transportation decision-making process➤ to prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations." <p>Then the section goes on to identify some of the low-income and minority communities that would be affected, but it ignores all of the adverse, disproportionate impacts on them.</p>
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69 (cont.)		<p>The construction contractor would be required to comply with a host of regulations that protect the environment from undue impacts, including those from hazardous materials. Examples are the support yards or staging areas that are temporarily used for construction equipment. To control any releases of hazardous waste, fueling and maintenance areas for trucks would be required to have spill protection measures and stormwater management plans in place (see pages 4-111, 4-112, 4-153, and 4-154 of the Draft Environmental Impact Statement).</p> <p>The West Van Buren Water Quality Assurance Revolving Fund site was identified and considered during development of the Draft Environmental Impact Statement (see page 4-165 of the Final Environmental Impact Statement, and the Draft Initial Site Assessment prepared for the proposed project). These sites are primarily groundwater-impact sites, and groundwater is found at a depth of over 60 feet below the footprint of the Preferred Alternative. Given the separation distance between the adversely affected medium (groundwater) and the construction zone (near-surface in these locations), the project team determined that these sites would not pose a risk to construction or to the general public once the facility were completed. This assessment has been clarified in the Final Environmental Impact Statement on page 4-165.</p>
70	Hazardous Materials	<p>The Arizona Department of Public Safety (which includes the State Highway Patrol) has primary responsibility for enforcing traffic laws. The Department of Public Safety also has primacy when calling in support for traffic accidents, including hazardous materials accidents (see text box on page 4-157 of the Final Environmental Impact Statement). The Department of Public Safety would determine, based on the incident, whether a partial or full closure of the facility would be required in the event of a hazardous materials spill. The Arizona Department of Transportation maintains a list of contractors who provide emergency response services, as well as local municipalities whose fire and police departments operate in cooperation with the Department of Public Safety on incidents within their jurisdiction. Requirements for shippers are maintained by the Arizona Department of Transportation’s Enforcement Compliance Division.</p>
71	Environmental Justice and Title VI	<p>The section entitled <i>Title VI and Environmental Justice</i>, beginning on page 4-29 in the Draft Environmental Impact Statement, presents acceptable methods, data, and assumptions to assess the potential for disproportionately high and adverse effects from the proposed action on environmental justice populations and disparate impacts to populations protected under Title VI. Based upon the content of the section, no such effects would result from the action alternatives.</p> <p>In light of comments received on the Draft Environmental Impact Statement, the above-referenced conclusions were confirmed in the preparation of the Final Environmental Impact Statement. To provide further clarity, the discussions of environmental justice and Title VI were separated and additional text explaining the relationship of environmental justice and Title VI to various environmental elements was added throughout Chapter 4, <i>Affected Environment, Environmental Consequences, and Mitigation</i>, as exemplified by the inserted text on page 4-29 of the Final Environmental Impact Statement.</p>

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71	<p>It concludes: No undue hardship or disproportionate adverse impacts on populations afforded protection under Title VI, Executive Order 12898, the U.S. Department of Transportation Order 5610.2(a), and other related statutes would occur and, therefore, no mitigation would be required.</p> <p>Nothing could be farther than the truth.</p>
72	<p>Air Toxics: The JATAP monitoring at the St. Johns monitoring site on the GRIC found certain air toxics attributed to “mobile sources,” or vehicular traffic burning hydrocarbons. These findings of the air toxics were many times the "accepted" cancer risk standard set by USEPA.</p> <p>The St. Johns monitoring site's annual mean concentrations of mobile source air toxics (MSATs):</p> <ul style="list-style-type: none">benzene at 4.7 times the accepted cancer risk standard;1,3 butadiene at 3.9 times the accepted cancer risk standard <p>The JATAP study also found other air toxics associated with transportation exhaust. Acetaldehyde, formaldehyde, ethylbenzene, m,p-Xylene, o-Xylene, and toluene were detected at high levels at the St. Johns monitoring site.</p> <p>Residents of the GRIC living around and adjacent to the monitoring site are currently being subjected to all of these carcinogens, not just one. And if a freeway were to be built near this monitoring site on the GRIC, there would be more air toxics in addition to the ones detected at levels that far exceed the USEPA risk standard.</p> <p>At the West Phoenix monitoring site, which is the same 43rd Avenue and Broadway site that has had many exceedances of the particulate matter standards, even higher levels of air toxics were found. This site is about a mile or so downwind from the proposed route of the South Mountain Freeway, and air toxics levels would be impacted by the freeway.</p> <p>The West Phoenix monitoring site's annual mean concentrations of mobile source air toxics (MSATs):</p> <ul style="list-style-type: none">benzene at 18.7 times the accepted cancer risk standard;1,3 butadiene at 21.5 times the accepted cancer risk standard <p>The JATAP study also found other air toxics associated with transportation exhaust. formaldehyde, ethylbenzene, m,p-Xylene, o-Xylene, and toluene were detected at high levels at the West Phoenix monitoring site.</p> <p>One of the JATAP's findings presented to the EPA National Air Monitoring Conference in November 2006 was, "Annual average concentrations of formaldehyde,</p>

Code	Issue	Response
72	Air Quality	<p>The Draft and Final Environmental Impact Statements present information and analysis about the proposed action and the enhanced conditions when compared against the No-Action Alternative and would not cause substantial adverse effects. The results of the analysis are summarized in the prologue to the Final Environmental Impact Statement (page xiii) and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement. The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones.</p> <p>The Draft Environmental Impact Statement provided the results of modeling for each of the seven priority mobile source air toxics, in both the Eastern and Western Subareas, and compared relative mobile source air toxics emissions that would result from three different potential alternatives (W59, W71, W101) as compared with the No-Action Alternative. It also included modeling of mobile source air toxics emissions in the overall mobile source air toxics study area assuming the W59 Alternative (see pages 4-70 to 4-74 of the Draft Environmental Impact Statement) along with implementation of recent U.S. Environmental Protection Agency mobile source air toxics rules.</p> <p>The updated emission modeling developed for the proposed action showed that for the mobile source air toxics study area, there would be little difference in total annual emissions of mobile source air toxics emissions between the Preferred and No-Action Alternatives (less than a 1 percent difference) in 2025 and 2035. With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions (see discussion beginning on page 4-77 of the Final Environmental Impact Statement). For mobile source air toxics, the project would have a negligible effect on emissions in the mobile source air toxics study area.</p> <p>The Preferred Alternative would also reduce in-vehicle mobile source air toxics exposure as opposed to the No-Action Alternative. The U.S. Environmental Protection Agency has found that in-vehicle benzene concentrations were between 2.5 and 40 times higher than nearby ambient concentrations, based on a review of studies discussed in the Regulatory Impact Analysis for the U.S. Environmental Protection Agency’s 2007 mobile source air toxics rule-making (Final Regulatory Impact Analysis, Environmental Protection Agency 420-R-07-002, 3-17 [February 2007]). Construction of the South Mountain Freeway would result in a reduction in benzene exposure to drivers and passengers for two reasons: decreased travel times (motorists would spend less time in traffic to reach their destinations) and lower emissions rates (attributable to speed improvements). Reducing on-road exposure would provide a health benefit for motorists using the freeway under consideration. Congestion relief resulting from the proposed freeway would provide localized air quality emissions reductions on area freeways and arterial streets and at interchanges, benefiting users of area highways and those living near congested roads.</p>

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72	<p>acetaldehyde, benzene and 1,3 butadiene were on the high end of the range reported in EPA funded assessments of other US cities."</p> <p>In the December 2006 ANALYSIS OF AIR TOXICS COLLECTED AS PART OF THE JOINT AIR TOXICS ASSESSMENT PROJECT FINAL REPORT, Page 3-6, it states this with more precision: "How Do Air Toxics Concentrations Compare with Typical National Levels? Phoenix area urban concentrations of 1,3-butadiene, acetaldehyde, formaldehyde, chloroform, benzene, and tetrachloroethene were typically on the high end of the national urban scale (i.e., above the 75th percentile). Other air toxics concentrations were typically within the interquartile range of national concentrations (25th to 75th percentile)."</p> <p>This finding relates to any future proposed freeway in the JATAP study area, which includes in entirety the route of the proposed South Mountain Freeway and Truck Bypass. It also has huge environmental justice implications because, in other words, some of the worst air in the country, in terms of air toxics, was found in the JATAP study, and the high readings on the GRIC are among these highest readings.</p> <p>So the air toxics are already worse than most other areas of the United States, and the proposed freeway would add even more. Obviously, adding more vehicular traffic emissions by building a freeway where there had not been one would add to this toxic burden. Yet despite its claims about environmental justice, these real environmental problems are not mentioned, nor is a plan to mitigate these impacts ever mentioned.</p> <p>The JATAP also showed serious air toxics problems at the West and South Phoenix monitoring sites, and these monitoring sites are in the midst of other low-income and ethnic minority communities, mostly of Hispanic origin. These would be exacerbated by the addition of another source of mobile toxics, also. The JATAP and its results mentioned "toxic hot spots near freeways" specifically because freeways cause toxic hotspots for air toxics.</p>
73	<p>One must conclude that the DEIS itself is an extreme example of environmental injustice, despite its assertions.</p>
72	<p><i>Thus, the failure to properly analyze and/or address the air toxics information from the JATAP study is a deliberate violation of the very Environmental Justice issues that ADOT and FHWA claim to be observing.</i></p>
73	<p>The conclusion is that ADOT and HDR would sacrifice human health and safety to accomplish their goal of building the South Mountain Freeway and Truck Bypass, and would rather see people on the GRIC, West and South Phoenix suffer and die from cancer than simply conduct an honest and objective NEPA process. Again, that appears to be a premeditated violation of the civil rights of the GRIC residents near the St. Johns JATAP monitoring site, as well as the low-income and ethnic minority communities of west and South Phoenix.</p>

Code	Issue	Response
72 (cont.)		<p>Summary information about the findings of the Joint Air Toxics Assessment Project study is provided as background information in the Draft and Final Environmental Impact Statements, but the study itself is not relevant to the type of analysis done pursuant to the Federal Highway Administration’s mobile source air toxics guidance, which is an emissions analysis. Monitored ambient concentrations of mobile source air toxics (the focus of the Joint Air Toxics Assessment Project) do not inform this type of analysis. While monitoring data can be useful for defining current conditions in the affected environment (to the extent that the monitoring data are current), they don’t tell us anything about future conditions, or the impacts of the project itself, which is why an emissions analysis was performed. The mobile source air toxic analysis presented beginning on page 4-77 of the Final Environmental Impact Statement is an estimated inventory of mobile source air toxic emissions for the entire Study Area for 2025 and 2035. This approach was used because the inventory estimate accounts for changes in traffic and emissions on all roadways affected by a proposed project, and would, therefore, be a more reliable predictor of changes in exposure to mobile source air toxics.</p> <p>The West Phoenix monitoring site is not the same as the West 43rd Avenue monitoring site.</p>
73	Environmental Justice and Title VI	<p>The section entitled <i>Title VI and Environmental Justice</i>, beginning on page 4-29 in the Draft Environmental Impact Statement, presents acceptable methods, data, and assumptions to assess the potential for disproportionately high and adverse effects from the proposed action on environmental justice populations and disparate impacts to populations protected under Title VI. Based upon the content of the section, no such effects would result from the action alternatives.</p> <p>In light of comments received on the Draft Environmental Impact Statement, the above-referenced conclusions were confirmed in the preparation of the Final Environmental Impact Statement. To provide further clarity, the discussions of environmental justice and Title VI were separated and additional text explaining the relationship of environmental justice and Title VI to various environmental elements was added throughout Chapter 4, <i>Affected Environment, Environmental Consequences, and Mitigation</i>, as exemplified by the inserted text on page 4-29 of the Final Environmental Impact Statement.</p>

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74	<p>Hazardous Materials Incidents</p> <p>The GRIC areas along the proposed freeway have extremely limited access and egress. A hazardous materials transportation incident such as a spill of gasoline, sulfuric acid, or chlorine and the potential consequences of that are detailed in the comments regarding the DEIS' complete failure to even mention the risks from a hazardous materials incident, much less mitigating the risks. Such an incident would certainly harm and/or doom the residents of the GRIC around the 51st Avenue pass, as well as the low-income, minority residents in portions of South and west Phoenix. This is another severe example of environmental injustice, as no consideration is made for the Native Americans on the GRIC, their lifestyle, and no plan or means for preparing for response to such a disaster is even mentioned in the DEIS. This is beyond the pale; it is akin to casually planning to set up small scale genocide. That is certainly an environmental injustice.</p>
75	<p>No Real Outreach to Environmental Justice Organizations</p> <p>There is mention in the DEIS of a myriad of organization and tribes that were approached about the DEIS, but not one environmental justice group in South or West Phoenix, or on the GRIC, were ever contacted. That has to be a deliberate step, as some of these groups even tried to approach ADOT and were rebuffed.</p> <p>All of this pattern of environmental racism is consistent with the theme of keeping out of the DEIS any mention of a negative against the construction of the freeway, even if it means, lying, obfuscating, ignoring data and organizations, and pretending problems don't exist, even when they are identified as some of the worst in the United States.</p> <p>The following are comments related to impacts related to the CANAMEX highway:</p> <p>The DEIS uses figures purposefully to overstate population and job growth based on the 2005 numbers. As disclosed at the meeting ADOT was aware of the discrepancies, but chose not to update with the 2010 census figures. Doesn't this discrepancy require correction before the final EIS ?</p> <p>There are some issues with the traffic studies in chapter three, they are quite convoluted:</p> <p>FOR THE E-1 Alignment</p> <p>1) ADOT and MAG cite the organic population growth(postulated in 2005) in the East valley as creating traffic flows along the 60 west bound to the i-10, and along the south mountain 202 (Pecos Road) also west bound and flowing to the 10. There is no indication of growth or traffic volumes originating along I-10 between Riggs Road and Pecos road because they are outside the study area...However these flows also course along I-10 into</p>

Code	Issue	Response
74	Hazardous Materials	<p>According to 46 <i>Federal Register</i> 18026 (March 23, 1981), the environmental impact statement must discuss reasonably foreseeable actions. These are actions that are likely to occur or probable, rather than those that are merely possible. The section Hazardous Materials beginning on page 4-152 of the Draft Environmental Impact Statement, discusses in sufficient detail the issues of hazardous spills, and the text box “Transport of Hazardous Materials on the Regional Freeway System” on page 4-154, describes response procedures to hazardous spills. The chance of spills in the referenced area is no different and no higher than the chance near Ahwatukee or Laveen or Estrella Villages. Therefore, there is no disproportionately high potential for spills to occur at specific locations of the freeway.</p> <p>The comment also makes reference to indigenous populations. As shown in Table 4-10 of the Draft Environmental Impact Statement, “<i>Environmental Justice and Title VI Population percentages, Affected Study Area Jurisdictions</i>” on page 4-30, indigenous populations are accounted for in the impact analyses. Further, Chapter 2, <i>Gila River Indian Community Coordination</i>, discloses the comprehensive nature of consultation and coordination efforts with the Gila River Indian Community. Important to note is the history of impact study on Gila River Indian Community land. For much of the project, the tribe did not, as is its right as a sovereign nation (see page 2-1), permit any form of impact analyses on its resources, nor did it wish to have any information about the Gila River Indian Community disclosed in the Draft Environmental Impact Statement. In 2007, right-of-entry was granted, but expired 1 year later. In 2010, the permit was reissued to study an alignment on Gila River Indian Community land (which is discussed in Chapter 3, <i>Alternatives</i>), but was later withdrawn once consideration by the tribe for a Gila River Indian Community-located alignment was withdrawn.</p> <p>But despite the Gila River Indian Community’s directive to neither study nor report on tribal resources and assets, the potential for such impacts is highly unlikely. Populations would not be directly affected by the proposed action. While the action may pose indirect impacts such as restricted access to place of tradition, adequate mitigation has been committed to ensure access would not be impeded. Further, in addition to the overall public outreach efforts, tribal members also had specific access to Gila River Indian Community-specific outreach. As outlined in Chapter 2, the Gila River Indian Community-specific outreach efforts were exhaustive.</p>
75	Public Involvement	<p>As noted in the section <i>Conclusions</i> on page 6-29 of the Final Environmental Impact Statement, the Arizona Department of Transportation and Federal Highway Administration exceeded National Environmental Policy Act requirements pertaining to public outreach. The measures are described in Chapter 6, <i>Comments and Coordination</i>, as well as throughout the Final Environmental Impact Statement. The Arizona Department of Transportation made effort to make all population sectors and representatives aware of the proposed action. Organizations, by default, are invited to participate in the environmental impact statement process. The public hearing for the proposed action was widely advertised. Newspaper ads in six newspapers of area-wide distribution ran advertisements at least twice each. Announcements occurred on five radio stations and six television stations. Mailers were sent on May 6, 2013 to 73,564 individuals (approximately 311 on the Gila River Indian Community) who had previously expressed an interest in the project. The Arizona Department of Transportation utilized the Government Delivery system to distribute to over 12,000 recipients. E-newsletters were distributed on three different occasions. All materials were also provided to the Gila River Indian Community Public Information Officer.</p>

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	<p>Hazardous Materials Incidents</p> <p>The GRIC areas along the proposed freeway have extremely limited access and egress. A hazardous materials transportation incident such as a spill of gasoline, sulfuric acid, or chlorine and the potential consequences of that are detailed in the comments regarding the DEIS' complete failure to even mention the risks from a hazardous materials incident, much less mitigating the risks. Such an incident would certainly harm and/or doom the residents of the GRIC around the 51st Avenue pass, as well as the low-income, minority residents in portions of South and west Phoenix. This is another severe example of environmental injustice, as no consideration is made for the Native Americans on the GRIC, their lifestyle, and no plan or means for preparing for response to such a disaster is even mentioned in the DEIS. This is beyond the pale; it is akin to casually planning to set up small scale genocide. That is certainly an environmental injustice.</p> <p>No Real Outreach to Environmental Justice Organizations</p> <p>There is mention in the DEIS of a myriad of organization and tribes that were approached about the DEIS, but not one environmental justice group in South or West Phoenix, or on the GRIC, were ever contacted. That has to be a deliberate step, as some of these groups even tried to approach ADOT and were rebuffed.</p> <p>76 All of this pattern of environmental racism is consistent with the theme of keeping out of the DEIS any mention of a negative against the construction of the freeway, even if it means, lying, obfuscating, ignoring data and organizations, and pretending problems don't exist, even when they are identified as some of the worst in the United States.</p> <p>The following are comments related to impacts related to the CANAMEX highway:</p> <p>77 The DEIS uses figures purposefully to overstate population and job growth based on the 2005 numbers. As disclosed at the meeting ADOT was aware of the discrepancies, but chose not to update with the 2010 census figures. Doesn't this discrepancy require correction before the final EIS ?</p> <p>78 There are some issues with the traffic studies in chapter three, they are quite convoluted:</p> <p>FOR THE E-1 Alignment</p> <p>1) ADOT and MAG cite the organic population growth(postulated in 2005) in the East valley as creating traffic flows along the 60 west bound to the i-10, and along the south mountain 202 (Pecos Road) also west bound and flowing to the 10. There is no indication of growth or traffic volumes originating along I-10 between Riggs Road and Pecos road because they are outside the study area...However these flows also course along I-10 into</p>
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Code	Issue	Response
76	Impacts	The environmental impact statement process and the Draft Environmental Impact Statement documenting the process represent a transparent, disclosed examination of the potential for the proposed action to cause significant, adverse environmental impact and to propose mitigation where necessary. Throughout the Draft Environmental Impact Statement, adverse impacts are disclosed. Compliance with the environmental impact statement process is described throughout the entire Draft Environmental Impact Statement and is summarized in Figure S-3, Environmental Impact Statement Process, on page S-3.
77	Purpose and Need	The analyses in the Draft Environmental Impact Statement used socioeconomic and traffic projections at the regional analysis zone and traffic analysis zone levels. At the time of publication of the Draft Environmental Impact Statement, Census 2010-based socioeconomic data at the regional analysis zone and traffic analysis zone levels had not been adopted by the Maricopa Association of Governments and were not available to the project team. Therefore, the data used in the Draft Environmental Impact Statement were the most appropriate information available. The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future.
78	Traffic	The road network for the Maricopa Association of Governments regional travel demand model includes all of Maricopa County and a substantial portion of Pinal County. While a road may not be within the Study Area for the proposed action, because it is included in the Maricopa Association of Governments travel demand model road network, its influence is considered in the traffic analysis for the proposed action. Location #7, Pecos Road to Wild Horse Pass Boulevard, shown on Figure 1-8 on page 1-15 of the Final Environmental Impact Statement, illustrates the anticipated growth along Interstate 10 from locations south of Pecos Road (including the Riggs Road to Pecos Road section identified in the comment). Between 2012 and 2035, the Interstate 10 traffic volume is projected to increase from around 96,000 to 134,000 vehicles per day (a 40 percent increase).

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	<p>Maricopa county This increased traffic growth created the gridlock at the Broadway curve, and will be even more constricted by 2035..</p> <p>This congestion according to ADOT is to be relieved by the SM202 alignment and is a pillar to support the E-1 Alignment.</p>
79	<p>The traffic flows exhibited in chapter 3 of the DEIS only describe how traffic originates on the 60 and SM202 and flows into or along the i-10. They merely describe how this creates constriction at the Broadway curve. There is no analysis of the traffic flows along I-10 and where they exit. This missing element creates a critical miss (in my opinion) to the purpose and need.</p>
80	<p>The majority of Traffic Westbound on I-10 flows onto 143 N to the airport and the 202 (red mountain) or to SR 51 North. These flows demonstrate a Northern flow of traffic North/ East Phoenix or even Western Scottsdale and Tempe, they do not flow through to downtown or I-17. Arterial Street traffic in downtown Phoenix in the AM does not support the argument that the traffic flows into or even past downtown into the West Valley.</p>
81	<p>This is demonstrated by showing a statistically insignificant (7 %) reduction in traffic at the Broadway curve using the current flawed assumptions. Adjusting for actual through flows to the 143 and SR 51 I believe the reduction in congestion at the curve to be less than 2 or 3 %.</p>
82	<p>The majority of traffic analysis is within the Western alignment where the West valley traffic needs relief to access I-10 along the northern route of the alignment....but this local commuter savings is not effected by the E-1 alignment. The E-1 alignment will not be utilized by this commuter traffic and will be utilized primarily as a truck bypass as acknowledged by ADOT on 6-11-13.</p>
83	<p>As for the CANAMEX</p> <p>2) Chapter three cites statistics that “more than one third”, or 34 % of the nations freight flows through Phoenix, today. There is no data cited to support that number. If correct it is understated for 2035 projections</p>
84	<p>Further the study is lacking because there is no analysis of the current or enhanced increase in freight volume resulting from the port activity in Guyamas and Puerto Colonet and the Union Pacific rail efforts moving that freight form those ports into Tucson and then north to Phoenix.</p> <p>Tucson is now recognized internationally as a “Virtual Port”. As of 2013 Union Pacific has agreed to move and receive 50,000 additional containers to be dispersed via truck and train north and East (correction from west). The ports of Long Beach and LA thus being obviated by the Ports and Rail lines in Mexico (Arizona Daily Star and SALEO Southern Arizona Logistics</p>
31	

Code	Issue	Response
79	Traffic	Chapter 1 of the Draft Environmental Impact Statement discloses the purpose and need for the proposed action. The analyses results disclose existing and future capacity deficiencies throughout the regional system including as noted in the comment at the Broadway Curve. The transportation problem identified specific to the purpose and need relates to east-west regional mobility in the southwest valley unique from the Broadway Curve. While the Draft Environmental Impact Statement further discloses the proposed freeway would help reduce congestion at the Broadway Curve, improvements to Interstate 10 through the curve are a part of another planned project adopted in the region’s Long Range Transportation Plan.
80	Traffic	While a portion of the traffic through the Broadway Curve is airport-related, an equal portion extends west to Interstate 17 and even to Interstate 10 west of downtown Phoenix.
81	Traffic	Chapter 1 of the Draft Environmental Impact Statement discloses the purpose and need for the proposed action. The analyses results disclose existing and future capacity deficiencies throughout the regional system including as noted in the comment at the Broadway Curve. The transportation problem identified specific to the purpose and need relates to east-west regional mobility in the southwest valley unique from the Broadway Curve. While the Draft Environmental Impact Statement further discloses the proposed freeway would help reduce congestion at the Broadway Curve, improvements to Interstate 10 through the curve are a part of another planned project adopted in the region’s Long Range Transportation Plan.
82	Traffic	An analysis of the origins and destinations of projected freeway users is presented in Figure 3-18, on page 3-36 of the Final Environmental Impact Statement. Freeway users are defined as those motorists who pass through the bend of the freeway (around the South Mountains). Therefore, this would not count motorists in Laveen Village who go to Interstate 10 (Papago Freeway) and motorists in Ahwatukee Foothills Village who go to Interstate 10 (Maricopa Freeway). The results of the origin-destination analysis show that 73 percent of the traffic going around the South Mountains has origins or destinations in the area within or around the Study Area and supports the conclusion that the proposed action would serve east–west mobility consistent with commuting movements.
		In reference to the comment regarding trucks using the proposed freeway to avoid Interstate 10 through downtown Phoenix, the vehicle mix and specifically the percentages of trucks using the facility is similar in vehicle mix ratios found throughout the region’s existing freeway system.
83	Traffic	The citation “MAG 2010c” is provided at the end of the first sentence of the third paragraph of the first column on page 3-64 of the Draft Environmental Impact Statement.
84	Traffic	As detailed in Chapter 1, <i>Purpose and Need</i> , in the Draft Environmental Impact Statement, the proposed action is not needed in response to national freight movement, nor is it intended to provide service primarily for freight movement. The proposed action is needed to address local capacity deficiencies and has been developed in response to local growth in population, housing, employment, and travel levels.

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	<p>Education Organization). To accommodate this volume the “ port of Tucson” has received a 10 X expansion since 2012. (KVOA Tucson). This information is omitted in the DEIS because it is outside the scope of the Study, which only encompasses Maricopa county, not the tri county (Maricopa, Pinal and Pima) alignment of the I-10 from Phoenix to Tucson, AKA the first leg of the CANAMEX.</p>
85	<p>ADOT will not address traffic flows originating outside Maricopa County.</p> <p>Also excluded from the DEIS because it is outside the scope of the report is that Union Pacific is currently negotiating with Arizona and the state land department to purchase state trust land to open a 950 acre rail yard at Picachio Peak. It is Planned to be the largest yard between Texas and California, multiple sources (AZ republic., AZ Starnet) the yard will handle tens of thousands of containers originating in California and Tucson ports</p> <p>The additional planned container traffic terminating at hubs in Pima (Tucson) county and the planned Pinal (Picachio peak) hubs create a significant increase in freight flows to Phoenix specifically to the hubs along 51st Ave.</p> <p>Arizona has identified the Intermodal Transportation industry as a critical potential “Pillar Industry” in Arizona.</p> <p>Chapter three describes freight and trucks as pass through, but that is a mis-statement. The assessment is technically correct, but not accurate. As a hub, Freight Enters Phoenix from Points south west and East. Those freight “Loads” are deposited and “exchanged” for loads heading in the opposite direction, So even though 70 % of the freight passes through Phoenix it terminates in Phoenix as a transfer point.</p> <p>Those volumes will increase by virtue of the intermodal transportation plans In Pima and Pinal counties, but were conveniently left out of the “study area”.</p>
86	<p>ADOT admitted the 202 is a truck bypass while attempting to minimize the utilization of the loop as a potion of the CANAMEX. In the 6-11 SMCAT meeting it was freely discussed how Congress has not dictated the exact route, and how the CANAMEX’ own web site self identifies the I-10 corridor, not any other. Additionally there is the current lack of suitability along the I-8/ 85 future I-11 route, which is obviated by the completion of the 202 highway anyway. In addition all Phoenix based shipping hubs are located “within” the new 202 loop and would be more efficiently accessed by ALL traffic types by using the 202.</p>
87	<p>ADOT surveyed truck drivers about routes in the early days of traffic review. Their surveys indicated that most traffic never passed through Phoenix. However the system of intermodal transport is hub and spoke, so freight comes in to a terminal and the driver drops the load and picks a new one, never passing through. So the Driver survey was</p>

Code	Issue	Response
85	Traffic	The road network for the Maricopa Association of Governments regional travel demand model includes all of Maricopa County and a substantial portion of Pinal County. While a road may not be within the Study Area for the proposed action, because it is included in the Maricopa Association of Governments travel demand model road network, its influence is considered in the traffic analysis for the proposed action.
86	Purpose and Need	<p>The statements made on June 11, 2013, as paraphrased in the comment as trucks would use the proposed freeway to avoid Interstate 10 through downtown Phoenix is misleading. The proposed freeway is part of a transportation system developed to improve mobility in the region by increasing capacity and allowing traffic—including truck traffic—to access a segment of the “loop” system (see pages 1-21, 1-22, 3-1, and 3-3 of the Final Environmental Impact Statement) in the Phoenix metropolitan area. The proposed South Mountain Freeway would be a commuter corridor, helping to move local traffic. As with all other freeways in the region, trucks would use it for the through-transport of freight, for transport to and from distribution centers, and for transport to support local commerce. Recognition of the trucking contribution to traffic in the region is disclosed on page 3-64 of the Final Environmental Impact Statement.</p> <p>As supported by the traffic analysis presented in the Final Environmental Impact Statement, the primary user vehicles of the proposed freeway would be automobiles. The Maricopa Association of Governments regional travel demand model projects that truck traffic would represent approximately 10 percent of the total traffic on the proposed action, similar to what is currently experienced on other regional freeways such as Interstate 10, State Route 101L, and U.S. Route 60. As disclosed in the Final Environmental Impact Statement, trucking destinations in the Phoenix metropolitan area would still prompt truck drivers to enter congested areas. Choosing to travel on the proposed freeway versus Interstate 10 would not produce substantial travel-time benefits. Therefore, it is expected that “true” through-truck traffic (not having to stop in the metropolitan area) would continue to use the faster, designated, and posted bypass system of Interstate 8 and State Route 85.</p>
87	Purpose and Need	The statements made on June 11, 2013, as paraphrased in the comment as trucks would use the proposed freeway to avoid Interstate 10 through downtown Phoenix is misleading. The proposed freeway is part of a transportation system developed to improve mobility in the region by increasing capacity and allowing traffic—including truck traffic—to access a segment of the “loop” system (see pages 1-21, 1-22, 3-1, and 3-3 of the Final Environmental Impact Statement) in the Phoenix metropolitan area. The proposed South Mountain Freeway would be a commuter corridor, helping to move local traffic. As with all other freeways in the region, trucks would use it for the through-transport of freight, for transport to and from distribution centers, and for transport to support local commerce. Recognition of the trucking contribution to traffic in the region is disclosed on page 3-64 of the Final Environmental Impact Statement.

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87	<p>correct. What is not accurate is the notion that the freight stays behind. As indicated in Chapter three of the Study Nearly 35 % of US freight passed through Phoenix. Phoenix is not a train hub so all of these containers are by truck. The DEIS is inadequate in its description of this container traffic and its effect</p> <p>Understand that the two ports in Mexico mentioned below are developed in partnership with Union Pacific to obviate the need to expand Long Beach and Los Angeles Harbors. This is stated frequently by supporters of the CANAMEX.</p> <p>See also the description by PAG, Pima Association of Governments http://www.pagnet.org/programs/transportationplanning/intermodaltransportation/freight/tabid/245/default.aspx http://azttca.org/20130601-feature.aspx I-11http://interstate11.org/exhibits.aspx</p> <p>The following are comments related to impacts related to the Deficiencies in Description of Proposed Action:</p> <p>A. The description of the proposed action is deficient. The action is described generally as building a freeway in compliance with the RTP. Lacking from the description are the following:</p> <ol style="list-style-type: none">1. The typical cross-section of the freeway should be included, listing major deviations, if any, from the typical cross-section for each of the three West Alternatives and the single East Alternative. <p>While at the outset the cross-section was not known, the 10-lane alternative was eliminated in the fourth-tier screening. A freeway with three general purpose (GP) and one High Occupancy Vehicle (HOV) lane in each direction, plus auxiliary lanes where necessary, was established for all alternatives.</p> <ol style="list-style-type: none">2. The profile for the freeway should be described in general terms for each Alternative.3. The location of proposed interchanges for each alternative should be shown.4. The fact that park-and-ride lots would be provided at interchanges should be stated. The term park-and-ride appears only once in the Summary (Page S-19) in the context of a mitigation measure for Displacements and Relocations. The term park-and-ride does not appear at all in Chapter 1 (Purpose and Need); it appears three times in Chapter 3 (Alternatives) first on Page 3-6 as part of the discussion of Modal Screening Results, the second time on Page 3-15, Figure 3-8 (indicating that the park-and-ride lot at the 40th Street Interchange potentially would be expanded, and for the third time on Page 3-40 in the context of the No-Action Alternative. Thus unless a reader studied Figure 3-8 very carefully, he or she would not be aware of the potential expansion of the park-and-ride lot at the 40th Street Interchange.
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87 (cont.)		As supported by the traffic analysis presented in the Draft and Final Environmental Impact Statements, the primary user vehicles of the proposed freeway would be automobiles. The Maricopa Association of Governments regional travel demand model projects that truck traffic would represent approximately 10 percent of the total traffic on the proposed action, similar to what is currently experienced on other regional freeways such as Interstate 10, State Route 101L, and U.S. Route 60. As disclosed in the Final Environmental Impact Statement, trucking destinations in the Phoenix metropolitan area would still prompt truck drivers to enter congested areas. Choosing to travel on the proposed freeway versus Interstate 10 would not produce substantial travel-time benefits. Therefore, it is expected that “true” through-truck traffic (not having to stop in the metropolitan area) would continue to use the faster, designated, and posted bypass system of Interstate 8 and State Route 85.
88	Proposed Action	While the proposed action is summarily defined on page 1-1 of the Draft Environmental Impact Statement as the “construction and operation of a major transportation facility,” design specifics for each action alternative are found in text beginning on page 3-40 of the Final Environmental Impact Statement. Sufficient detail is provided to: ensure meaningful comparison and analyses of the alternatives in reference to operational characteristics, cost, and impacts; and to convey sufficient information to reviewers of the characteristics of each alternative in accordance with 23 Code of Federal Regulations 771 Environmental Impact and Related Procedures or in the Federal Highway Administration Technical Advisory T 6640.8A Guidance for Preparing and Processing Environmental and Section 4(f) Documents.
89	Alternatives	Key elements of the alternatives studied in detail are presented in the Draft Environmental Impact Statement, beginning on page 3-40. A typical section of the proposed freeway is depicted in Figure 3-34, on page 3-58 of the Draft Environmental Impact Statement.
90	Alternatives	The vertical alignment of each action alternative is described beginning on page 3-40 of the Draft Environmental Impact Statement. The profiles are shown graphically in Figures 3-20 to 3-25.
91	Alternatives	The proposed interchange locations for each action alternative are shown in Figure 3-28, on page 3-51 of the Draft Environmental Impact Statement.
92	Alternatives	Inclusion of park-and-ride lots is not part of the scope of the proposed action. No new park-and-ride lots are proposed as part of the proposed action. Locations of future park-and-ride lots would be determined by the City of Phoenix and Valley Metro (see discussion of potential enhancements on page 3-60 of the Draft Environmental Impact Statement).
93	Transit	Inclusion of park-and-ride lots is not part of the scope of the proposed action. No new park-and-ride lots are proposed as part of the proposed action. Locations of future park-and-ride lots would be determined by the City of Phoenix and Valley Metro (see discussion of potential enhancements on page 3-60 of the Draft Environmental Impact Statement).

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93	There is no mention of park-and-ride in the Traffic Overview Report.
94	For the public in general, the Regional Transportation Plan (RTP) and complying with the RTP are abstract and perhaps foreign concepts. The Description of the Proposed Action should have sufficient information to help the public visualize what is being proposed on the ground.
95	<p>Deficiencies in Evaluation of Alternatives</p> <p>B. The evaluation of alternatives is deficient because there is no analysis of traffic impacts on local streets and local access. A specific example would be how Pecos Road would be impacted by the Proposed Action. With the Proposed Action, the South Mountain Freeway (SMF) would obliterate and replace existing Pecos Road (as described as Alternative E1); access to the street system in the area would be provided via interchanges at 40th Street, 24th Street, Desert Foothills Parkway, and 17th Avenue.</p> <p>1. The DEIS does not indicate what type of interchange would be constructed at these locations. Because there would be no access to the Gila River Indian Community (GRIC) on the south side, neither of the two typical interchanges depicted on Page 3-14, “Diamond Interchange” and “Single Point Urban Interchange,” would be applicable. The DEIS should indicate the type of interchange to be provided, at least conceptually and with a simple graphic.</p> <p>2. The DEIS should present recent traffic volume counts for Pecos Road and turning movement counts at the existing signalized intersections at 40th Street, 32nd Street, 24th Street, Desert Foothills Parkway, and 17th Avenue. Then it should discuss the impacts on existing traffic due to the loss of access at 32nd Street and how existing traffic patterns will change. Then, 2035 peak hourly traffic volumes at the interchanges should be presented so that the public can be informed of how present routings will be affected and what the impacts will be in 2035. The impacts on the cross streets are not dependent on the specific design details and can be evaluated based on the traffic volume projections.</p> <p>3. The DEIS should discuss how the Proposed Action would affect emergency vehicle access times for the communities now served by the signalized intersection at Pecos Road/32nd Street.</p> <p>4. With the Proposed Action, the eastbound left-turn and westbound right turn direct access to the park-and-ride facility at 40th Street will be lost, shifting the ride-share traffic to the two park-and ride access points via 40th Street. The southern access driveway is less than 300 ft (center-to-center) north of Pecos Road. The construction of the freeway ramps will shorten the spacing between the junction of the westbound ramp terminal and the southern access driveway for the park-and-ride lot. The impacts to traffic operations along 40th Street, impacts to park-</p>
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94	Alternatives	As described in the responses above, the elements of the proposed freeway and the potential action alternatives were described in the Draft Environmental Impact Statement.
95	Alternatives	See responses to specific comments below. The alternatives analysis process of developing and screening documents was a disclosed, robust, comprehensive, objective and consistent with the National Environmental Policy Act’s intent to use a logical, sequential interdisciplinary approach to establish a range of reasonable alternatives (as concluded in text beginning on page 3-26 of the Draft Environmental Impact Statement).
96	Alternatives	<p>The third bullet in the third column on page 3-51 of the Draft Environmental Impact Statement states that “The diamond interchange configuration (see sidebar on page 3-14) was used to evaluate service traffic interchange needs.”</p> <p>The comment is incorrect in assuming that there would be no access to the Gila River Indian Community to the south. At 40th Street, there is an existing road to the south, and the planned interchange at that location would provide access onto Gila River Indian Community land. Similarly, the interchanges at 24th Street, Desert Foothills Parkway, and 17th Avenue would be constructed to allow for future connections from Gila River Indian Community land. The initial layout would be similar to the interchanges at State Route 202L (Red Mountain Freeway) and Dobson Road. Figure 3-28 indicated whether the interchanges would include full access or half access.</p> <p>In some locations, a single-point urban interchange or other interchange type may be used to address higher traffic volumes. The determination of the interchange type would be made during final design in coordination with the local jurisdiction.</p>
97	Traffic	Text beginning on page 3-60 of the Final Environmental Impact Statement presents the traffic analyses for the action and no action alternatives for existing and future conditions. The analyses used state-of-the-practice methods and analytical tools to demonstrate the traffic operational performance of each alternative. Ancillary to the effort, in 2006, the City of Phoenix conducted a traffic circulation study to evaluate the impacts of the freeway on the local street system, including the shift of access to Foothills Reserve and Calabrea from Pecos Road to Chandler Boulevard. The City study found no adverse effects on the local street system from the proposed freeway.
98	Traffic	Emergency responders would address the construction of the proposed freeway by amending the local emergency response plan to include the facility. As concluded in the section, <i>Social Conditions</i> , in Chapter 4 of the Draft and Final Environmental Impact Statements, response times for police, fire, and medical emergency services would be faster when compared with response times under the No-Action Alternative. Circulation on major arterial streets would be improved through better distribution of traffic onto the overall transportation network, the provision of alternative routes, and through localized operational improvements such as grade separations and planned interchanges.
99	Traffic	In addition to access from 40th Street, access to the park-and-ride lot would be provided from the westbound on-ramp. This is similar to the park-and-ride operations at Happy Valley Road and Interstate 17. Bus operations and circulation would continue to function as they do today. Traffic operational characteristics along 40th Street and at the Cottonwood Lane intersection would not be adversely affected by the freeway. The park-and-ride lot has been expanded to its ultimate configuration.

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	and-ride access, impacts on bus operations, impacts at the intersection of 40 th Street/E Cottonwood Lane/bus access to park-and-ride should be evaluated, both for existing and 2035 traffic volumes. The long-term expansion of the park-and-ride facility should also be discussed.
100	5. The DEIS should discuss how access will be provided to the existing U-Haul Dealer on the south side of Pecos Road, now accessed directly via the signalized intersection at 32 nd Street. Since there will be no interchange at 32 nd Street with the Proposed Action, this property will become land-locked. It is unclear based on the information in Tables 4-12 and 4-13 (Pages 4-39 and 4-42, respectively) if this facility is being displaced.
101	<p>C. The evaluation of alternatives is deficient because the presentation of the results of the “select link” analysis is misleading. On Page 3-36, Figure 3-18 presents the contribution of traffic to the select link by geographical areas, some of which are very large. The select link is at a point between the 51st Avenue and 17th Avenue interchanges on the South Mountain Freeway. The text accompanying Figure 3-18 states that “<i>A projected 73 percent of the travelers who might use the proposed action would have origins and/or destinations near the proposed action.</i>” This statement is misleading, since it implies that 73% of the traffic using the South Mountain Freeway would have origins in close proximity to the proposed freeway.</p> <p>A review of a larger scale map in the Traffic Overview Report, which is the source of the information presented in Figure 3-18, indicates that about 15% of the selected link traffic would have origins or destinations within the Study Area as defined in Figure S-2 of the DEIS. If the definition of “proximity” were to be extended to the area within a 20-mile radius of the select link, the contribution of this entire 20-mile radius area would be about 40 to 50%.</p> <p>The following are comments related to impacts related to the Religious and Racial Discrimination and Civil Rights Violations in the South Mountain Freeway DEIS:</p> <p>The DEIS clearly discriminates on the basis of religion and race, and the ongoing ADOT plans for blasting <i>Muhadagi Doog</i> (South Mountain) are ongoing civil rights violations.</p> <p>Throughout the DEIS, it is acknowledged that the GRIC and other native American tribes hold <i>Muhadagi Doog</i> as a sacred site. From the actual language of the DEIS: “The South Mountains are highly valued and considered sacred by some Native American communities. The Community, which includes the Akimel O’odham (River Pima) and Pee Posh (Maricopa) tribes, and other Native American entities—including the Colorado River Indian Tribes and three O’odham groups: the Salt River Pima-Maricopa Indian Community, the Ak-Chin Community, and the Tohono O’odham Nation—consider the South Mountains to play a role in their cultures, identities, histories, and oral traditions.”</p>
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100	Traffic	The determination to not include an interchange at 32nd Street was made in coordination with the City of Phoenix (see Figure 3-8 on page 3-15 of the Draft Environmental Impact Statement). The interchange would have displaced more than 100 homes and would have been located near an existing high school. In 2006, the City of Phoenix conducted a traffic circulation study to evaluate the impacts of the proposed freeway on the local street system, including the shift of access to Foothills Reserve and Calabrea from Pecos Road to Chandler Boulevard. The City study found no adverse effects on the local street system from the freeway (see Appendix 3-1 in the Final Environmental Impact Statement). The storage facility is located on Gila River Indian Community land and would not be displaced. Reasonable access to the facility would remain available from 32nd Street, Chandler Boulevard, and other east-west local streets. A grade-separated bridge would be constructed for the freeway to go over 32nd Street.
101	Traffic	The quotation noted in the comment has been changed to be consistent with a similar statement made in the caption to Figure 3-18: “Seventy-three percent of travelers anticipated to use the proposed action would be involved in trips beginning or ending in the Study Area itself or in the areas immediately surrounding it.” The figure does portray the locations of the cities included in the different areas. The proposed action would serve regional travel from the southwestern to southeastern portions of the region (not just internal Study Area travel). The analysis does consider traffic that passes through the Phoenix metropolitan area. It should also be noted that, by definition, these freeway users would not include traffic from Laveen Village to Interstate 10 (Papago Freeway) or from Ahwatukee Foothills Village to Interstate 10 (Maricopa Freeway). Therefore, the 15 percent of trips identified in the comment as Study Area-originated are by motorists traveling to the other side of the South Mountains.
102	Cultural Resources	<p>The cultural and religious places of importance, like the South Mountains, are acknowledged in the Draft Environmental Impact Statement in several locations, notably pages 4-132 and 5-26. The proposed project, would accommodate and preserve (to the fullest extent possible from the available alternatives) access to the South Mountains for religious practices.</p> <p>The section entitled <i>Title VI and Environmental Justice</i>, beginning on page 4-29 in the Draft Environmental Impact Statement, presents acceptable methods, data, and assumptions to assess the potential for disproportionately high and adverse effects from the proposed action on environmental justice populations and disparate impacts to populations protected under Title VI. Based upon the content of the section, no such effects would result from the action alternatives.</p> <p>In light of comments received on the Draft Environmental Impact Statement, the above-referenced conclusions were confirmed in the preparation of the Final Environmental Impact Statement. To provide further clarity, the discussions of environmental justice and Title VI were separated and additional text explaining the relationship of environmental justice and Title VI to various environmental elements was added throughout Chapter 4, <i>Affected Environment, Environmental Consequences, and Mitigation</i>, as exemplified by the inserted text on page 4-29 of the Final Environmental Impact Statement.</p> <p>Since the beginning of the environmental impact statement process, the Federal Highway Administration and Arizona Department of Transportation have been carrying out cultural resource studies and engaging in an ongoing, open dialogue with the Gila River Indian Community Tribal Historic Preservation Office regarding</p>

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102 (cont.)		<p>the identification and evaluation of places of religious and cultural importance to the Gila River Indian Community that may be adversely affected by the proposed freeway. Such places are referred to as traditional cultural properties. As a result of these discussions and of studies conducted by the Gila River Indian Community’s Cultural Resource Management Program, the Gila River Indian Community has identified traditional cultural properties that are eligible for listing in the National Register of Historic Places and that could be affected by construction of the proposed freeway. In certain cases, listing these properties on the National Register of Historic Places may offer them protection under Section 4(f) of the Department of Transportation Act. The traditional cultural properties identified are culturally important to other Native American tribes as well. For more discussion of traditional cultural properties, see the section, <i>Cultural Resources</i>, beginning on page 4-140 of the Final Environmental Impact Statement and pages 5-26 through 5-28.</p> <p>Section 106 of the National Historic Preservation Act requires a government-to-government relationship between the Federal Government and Indian tribes as described beginning on page 4-140 of the Final Environmental Impact Statement. Section 106 requires that federal agencies take into account the effects of their undertakings on historic properties. This process requires consultation with tribal authorities. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. The consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Register of Historic Places eligibility recommendations (including traditional cultural properties), project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.</p> <p>The Draft Environmental Impact Statement, after consultation and coordination efforts, accommodates and preserves (to the fullest extent possible from the available alternatives) access to the South Mountains for religious practices. A very small portion of the mountain would be impacted by the proposed freeway (less than 0.03 percent of the total area). Although the Draft Environmental Impact Statement describes the impact on the South Mountains as adverse, Native Americans would not be kept from practicing their beliefs, access to the mountain would be maintained, and mitigation measures would be implemented based on input from members of the Gila River Indian Community.</p>

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102	<p>There is plenty of correspondence in the DEIS and its Appendices in which the GRIC repeatedly asserts and reminds ADOT of this, to no avail. ADOT plans to blast Muhadagi Doog.</p> <p>If we were to take a look at the same issue and frame it as a danger to a sacred site that plays a role in cultures, identities, histories, and oral traditions of a white, European-based religion, such as the Vatican, a sacred site for the Roman Catholic Church, we can illuminate how this is clearly religious discrimination, and likely racial discrimination. If Rome, Italy decided there needed to be a freeway that needed to take out part of the Vatican, well, that would just be unthinkable to the people there of the Roman Catholic faith. Think of the outrage and outcry such a proposal would muster, even worldwide!</p> <p>So what is the difference between the Vatican and Roman Catholics' beliefs, and Muhadagi Doog and the "Native American entities?"</p> <p>This attitude and planned action deliberately and intentionally violates the civil rights of the "Native American entities." In a 1979 consultation on the issue, the United States commission on civil rights defined religious discrimination in relation to the civil rights guaranteed by the Fourteenth Amendment to the United States Constitution. [Section 1. All persons born or naturalized in the United States, and subject to the jurisdiction thereof, are citizens of the United States and of the State wherein they reside. No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws.]</p> <p>As for racial discrimination, the equal protection clause was originally added to deal with the lack of equal protection provided by law to all in the course of administering justice in the states that had Black codes.</p> <p>The United States commission on civil rights noted, "Whereas religious civil liberties, such as the right to hold or not to hold a religious belief, are essential for Freedom of Religion (in the United States secured by the First Amendment), religious discrimination occurs when someone is denied "the equal protection of the laws, equality of status under the law, equal treatment in the administration of justice, and equality of opportunity and access to employment, education, housing, public services and facilities, and public accommodation because of their exercise of their right to religious freedom." (Emphasis added.)</p> <p>Also, the American Indian Religious Freedom Act (commonly abbreviated to AIRFA) is a US federal law and a joint resolution of Congress that was passed in 1978. It was created to protect and preserve the traditional religious rights and cultural practices of American Indians, Eskimos, Aleuts and Native Hawaiians. These rights include, but are not limited to, access of sacred sites, repatriation of sacred objects held in museums, freedom to worship through ceremonial and traditional rites, including within prisons, and use and possession of objects considered sacred. (Emphasis added.) The</p>
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102 (cont.)		<p>Several action alternatives were subject to the alternatives development and screening process; not just the E1 Alternative and alternatives located on the Gila River Indian Community (Figure 3-6 on page 3-10 of the Final Environmental Impact Statement illustrates a representation of such alternatives). Ultimately the other alternatives were eliminated from further study in the screening process and the Gila River Indian Community decided not to give permission to study alternatives on its land (see Final Environmental Impact Statement page 3-25). Therefore, the Arizona Department of Transportation, with concurrence from Federal Highway Administration, identified the E1 Alternative as the eastern section of the Preferred Alternative (which includes the W59 Alternative in the Western Section of the Study Area). In reaching its determination, the Arizona Department of Transportation sought to balance its responsibilities to address regional mobility needs while being fiscally responsible and sensitive to local communities.</p>
103	Title VI, 14th Amendment	<p>Since the beginning of the environmental impact statement process, the Federal Highway Administration and Arizona Department of Transportation have been carrying out cultural resources studies and engaging in ongoing, open consultation with the Gila River Indian Community Tribal Historic Preservation Office regarding the identification and evaluation of places of religious and cultural importance to the tribe that may be adversely affected by the proposed freeway. Such places are referred to as traditional cultural properties. As a result of these discussions and of studies conducted by the Gila River Indian Community's Cultural Resource Management Program, the Gila River Indian Community has identified traditional cultural properties that are eligible for listing in the National Register of Historic Places and that could be affected by construction of the proposed freeway. In certain cases, listing these properties on the National Register of Historic Places may offer them protection under Section 4(f) of the Department of Transportation Act. The traditional cultural properties identified are culturally important to other Native American tribes as well. For more discussion of traditional cultural properties, see the section, <i>Cultural Resources</i>, beginning on page 4-140 of the Final Environmental Impact Statement and pages 5-26 through 5-28.</p> <p>Section 106 of the National Historic Preservation Act requires a government-to-government relationship between the Federal Government and Indian tribes as described beginning on page 4-140 of the Final Environmental Impact Statement. Section 106 requires that federal agencies take into account the effects of their undertakings on historic properties. This process requires consultation with tribal authorities. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. The consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Register of Historic Places eligibility recommendations (including traditional cultural properties), project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.</p>

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103	<p>Act required policies of all governmental agencies to eliminate interference with the free exercise of Native religion (Emphasis added.), based on the First Amendment, and to accommodate access to and use of religious sites to the extent that the use is practicable and is not inconsistent with an agency's essential functions. It also acknowledged the prior violation of that right.</p> <p>Clearly, the No Build Alternative is the only viable option that does not constitute a violation of the 14th Amendment to the Constitution and a violation of the American Indian Religious Freedom Act as any freeway alternative proposed in the DEIS of the South Mountain Freeway requires blasting away part of Muhadagi Doog.</p>

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103 (cont.)		<p>The American Indian Religious Freedom Act, 42 United States Code Section 1996, provides a policy statement of the United States “to protect and preserve for American Indians their inherent right of freedom to believe, express, and exercise the traditional religions of the American Indian . . . including but not limited to access to sites, use and possession of sacred objects, and the freedom to worship through ceremonials and traditional rites.”</p> <p>The Arizona Department of Transportation and Federal Highway Administration complied with the policy stated in the American Indian Religious Freedom Act throughout the environmental impact statement process, as evidenced by consultation efforts, mitigation measures, and a discussion of cultural resource issues in the Draft Environmental Impact Statement. The study would not violate the American Indian Religious Freedom Act because, as stated above, the Gila River Indian Community would not be prohibited from continuing to practice their beliefs even if the project goes forward, since access to the mountain will be maintained, impacts will be mitigated based on input by the Gila River Indian Community and others, and only a small fraction of the mountain would be affected.</p>

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104	<p>Failure to Provide Timely Access to NEPA Documents and Public Records; Obstruction</p> <p>ADOT made it extremely difficult for the public to actually review the DEIS, Appendices, and Technical Reports. ADOT was evasive and not at all forthcoming with these, even when proper processes to gain access to these were employed. This is in violation of NEPA regulations.</p> <p>Despite the statements on page 6-23 of the South Mountain Freeway (Loop 202) DEIS and Section 4(f) Evaluation Chapter 6, Comments and Coordination that printed copies of the documents were "available for review only and at no charge at the following repositories throughout the Study Area," the Appendices and Technical Reports were not ever at these for review, even when this was pointed out to ADOT. (These repositories were: Phoenix Public Library – Ironwood Branch, 4333 East Chandler Boulevard, Phoenix, AZ 85048; Phoenix Public Library – Burton Barr Central Library, 1221 North Central Avenue, Phoenix, AZ; Sam Garcia Western Avenue Library, 495 East Western Avenue, Avondale, AZ 85323, and the Tolleson Public Library, 9555 West Van Buren Street, Tolleson, AZ 85353.)</p> <p>This page, which was available on the Internet, also claimed that these documents were available, by appointment, "at the ADOT Environmental Planning Group, 1611 West Jackson Street, Phoenix, AZ 85007, (602) 712-7767" but no one ever answered this number or returned my repeated phone calls and messages.</p> <p>The posting also claimed, "Compact disks are available at no charge and can be obtained by request by calling (602) 712-7767." Again, no one ever answered this number or returned phone calls, after I started calling and leaving messages on Thursday, June 6, 2013. I also requested them through the Public Information Officer for ADOT, to no avail. This led me to contact the ADOT director's office several times to ask for these materials on June 10, 2013, and I was finally handed a CD of the Technical Reports at 5PM of that day after driving to ADOT's offices to retrieve them.</p> <p>However, when I loaded the CD on my computer, I found that three of the Technical Reports were not on the CD. I had to repeatedly call ADOT and request and re-request these, asking about the interminable delays in producing them. After 16 calendar days from that, I was finally allowed to see the final Technical Report on Cultural Resources.</p> <p>Brock J Barnhart, ADOT Assistant Communication Director, even tried to assert that some of these were confidential and restricted, claiming on June 18, 2013, when he finally did email me the Scoping Report,:</p> <p>"The reports are indeed confidential and are protected by the National Historical Preservation Act.</p> <p>Section 304</p>

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104	Public Involvement	The Draft Environmental Impact Statement was made available at five public locations throughout the area and was available for purchase at one location. The Draft Environmental Impact Statement was available also by compact disc by request, at the public hearing, and on the Web site at <azdot.gov/southmountainfreeway>. These locations were well advertised and documented on page 6-23 of the Draft Environmental Impact Statement. Technical reports and other information were available by request.
105	Public Involvement	Hard copies of the Draft Environmental Impact Statement and Section 4(f) Evaluation were made available at the repositories. All copies placed for public viewing contained the appendices as a compact disc in pockets in the back of the document. The comment is correct that the technical reports supporting the Draft Environmental Impact Statement were only available by request.
106	Public Involvement	The first record of a call placed to the Arizona Department of Transportation Environmental Planning Group by the commenter, was Saturday, June 8, 2013. The call was returned to the commenter on Monday, June 10, 2013 and a disc containing the technical reports was provided on the same day.
107	Public Involvement	The technical reports were provided to the commenter, as requested, on June 10, 2013, the same day they were requested.
108	Public Involvement	<p>On June 17, 2013, the commenter contacted the Arizona Department of Transportation by e-mail to request a scoping technical report, if one existed. The scoping technical report was provided on June 18, 2013.</p> <p>Two of the technical reports requested (Cultural Resources and Section 4[f]) contained confidential information. After discussion with the Federal Highway Administration, release of the reports, in redacted form, was approved. Additional time was required for the Arizona Department of Transportation's cultural staff to review the documents and to redact the information deemed confidential. However, the redacted technical reports were provided on June 28, 2013.</p>

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	<p>[16 U.S.C. 470w-3(a) — Confidentiality of the location of sensitive historic resources]</p> <p>(a) The head of a Federal agency or other public official receiving grant assistance pursuant to this Act, after consultation with the Secretary, shall withhold from disclosure to the public, information about the location, character, or ownership of a historic resource if the Secretary and the agency determine that disclosure may —</p> <p>(1) cause a significant invasion of privacy;</p> <p>(2) risk harm to the historic resources; or</p> <p>(3) impede the use of a traditional religious site by practitioners."</p> <p>Of course, this statute refers to information, not whole reports. When I pointed that out in an email, he agreed to produce the report, but that took another eight days.</p> <p>I gained access to the last of these Technical Reports on June 26, 2013, with portions redacted. That was less than 30 days before the close of comment.</p>

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	The image shows the front cover of a report. The cover has a light blue background. In the center, the word "REPORTS" is written in a bold, black, sans-serif font and is underlined. Below it, the word "Four" is written in a bold, black, sans-serif font. Further down, the subtitle "Review and Critique of DEIS for Loop 202 (South Mountain Freeway) by Herman Basmacıyan, P.E. dated July 17, 2013." is written in a smaller, italicized, black, sans-serif font. On the left side of the cover, there are several white rectangular marks, possibly from a binder or punch holes.

Code	Issue	Response

Code	Comment Document
109	<p>HERMAN BASMACIYAN, P.E. Traffic, Transportation, Parking Expert Witness and Consulting Services 701 Marguerite Avenue Corona del Mar, CA 92625 Tel: 949-903-5738 herman.b@roadrunner.com</p> <p>July 17, 2013</p> <p>Ms. Pat Lawlis President, Protecting Arizona’s Resources and Children (PARC) P.O.Box 50455 Phoenix, Arizona 85076-0455</p> <p>Proj. No. 130601</p> <p>Subject: DEIS for Loop 202, South Mountain Freeway</p> <p>Dear Ms. Lawlis:</p> <p>Per your request, I have reviewed the Draft Environmental Impact Statement (DEIS) for Loop 202, South Mountain Freeway (SMF) and related documents pertaining to travel modeling, traffic, circulation, and transportation and traffic engineering/planning.</p> <p>I am a Registered Civil and Traffic Engineer in the State of California (Registration Numbers 20137 and 525, respectively) and a Registered Engineer (in retired status) in the States of Washington, Arizona, and Florida. I have over 50 years of experience in traffic and transportation engineering, traffic modeling and forecasting, parking studies, and the preparation of traffic impact studies. I have personally prepared or had a key role in the preparation of over 400 reports, including environmental documents, in various jurisdictions in California, Arizona, Washington, Oregon, Nevada, Colorado, Montana, Louisiana, and Ohio, as well as several multi-State projects sponsored by the U.S. Department of Transportation. My curriculum vitae (cv.) is attached.</p>

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109		See responses to direct comments below.

Code	Comment Document
	<p>Ms. Pat Lawlis July 17, 2013 Page 2</p> <p>Based on my review of the documents cited above and my education, professional knowledge and many years of experience, I have identified deficiencies and/or omissions in the environmental documentation for the Loop 202 South Mountain Freeway project. These deficiencies and/or omissions are discussed in my report, attached. In view of these deficiencies and/or omissions, I have concluded that the DEIS leads to the selection of a Preliminarily Preferred Action Alternative, improperly.</p> <p>In my opinion, based on the information presented, the No Action Alternative should have been selected as the preferred course of action.</p> <p>Please contact me if I can provide further details or clarification about any matters covered in this letter and the attached report.</p> <p>Sincerely,</p> <p>Herman Basmacıyan, P.E.</p> <p>Attached: Curriculum Vitae Review and Critique of DEIS for Loop 202 (South Mountain Freeway)</p> <p>HERMAN BASMACIYAN, P.E.</p>

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Herman Basmacıyan, P.E.

Profile

- Over 50 years of transportation planning and traffic engineering experience, including services to legal professionals
- Expert witness services in San Diego, Orange, Los Angeles, Riverside, and San Mateo Counties in eminent domain, traffic engineering, transportation engineering/planning, and parking matters
- Experience in numerous traffic impact studies, transportation planning projects, parking studies, analysis of land use/transportation system interrelationships and traffic/transportation engineering
- Management of, or key role in, a wide variety of transportation/traffic engineering projects in California, Oregon, Washington, Arizona, Nevada, Colorado, Montana, New Mexico, Ohio, and Louisiana

Education

- Master of Science in Civil Engineering, University of Virginia, 1962
- Bachelor of Science in Civil Engineering, Robert College, 1960
- Numerous Short Courses in Transportation and Traffic Engineering

Registration

Professional Engineer:

- California, Civil
- California, Traffic
- Arizona (retired status)
- Florida (retired status)
- Washington (retired status)

Professional Organizations

- Institute of Transportation Engineers
- American Society of Civil Engineers

Employment History

- **Individual** Providing Expert Witness and Consultant Services, Corona del Mar, CA, since January 2005
- **Transportation Consultant**, County of Riverside, Riverside, CA, 2005-2011
- **Vice President**, Kimley-Horn and Associates, Inc, Orange, CA 1992-2004
- **Principal**, Basmacıyan-Darnell, Inc., Irvine, CA 1978-1992
- **Principal**, Herman Basmacıyan and Associates, Newport Beach, CA 1976-1978

HERMAN BASMACI AN, P.E.

Code	Issue	Response
110		Résumé

Code	Comment Document
	<ul style="list-style-type: none">• Senior Associate, VTN Corporation, Irvine, CA, and Bellevue, WA 1971-1976• Senior Transportation Planning Engineer, DeLeuw, Cather and Company, San Francisco, CA 1970-1971• Advisory Analyst, Service Bureau Corporation (then a subsidiary of IBM), Palo Alto, CA 1967-1970• Director, Puget Sound Regional Transportation Study, Seattle, WA 1962-1967• Research Assistant, Virginia Council of Highway Research, Charlottesville, VA 1960-1962 <p><i>Representative Projects in Arizona</i></p> <ul style="list-style-type: none">• Business 8 Corridor Study, Yuma, AZ• Development of Traffic Circulation Models, Flagstaff, AZ• Downtown Transportation Study, Tempe, AZ• FMPO Travel Demand Model Update and Data Collection, Flagstaff, AZ• Arizona Passenger Rail Feasibility Study, Arizona Department of Transportation, AZ• Business 8 Corridor Study, Yuma, AZ• Phoenix Urban Area Public Transportation Study, Phoenix, AZ• Statewide Rail Passenger Feasibility Study, Statewide, AZ• Traffic Circulation Study, San Luis, AZ• Yuma Area Service Highway Major Investment Study, Design Concept Report, and Environmental Assessment, Yuma, AZ• Yuma Regional Transportation Study, Yuma, AZ• Yuma Regional Transportation Study, Yuma, AZ <p><i>Other Major Representative Projects</i></p> <ul style="list-style-type: none">• Analysis of Transit Services and Transit System Improvement Options, Boulder, CO• MAGLEV in Southern California, Los Angeles, CA• Major Investment Study for rail and bus transit improvements in Cincinnati, Ohio and vicinity• Southeast Los Angeles/Western Orange County Transportation Study, Southern California Association of Governments, CA• Public Transportation Alternatives Feasibility Study, including High-Speed Trains, Western WA• Alternatives Analysis for Transitway Program, Orange County, CA• Cross-Sound Transportation Study, Puget Sound Region, WA• Downtown Transit Terminal Location Study, Mountain Line, Missoula, MT <p>HERMAN BASMACI AN, P.E.</p>

Code	Issue	Response

Code	Comment Document
	<ul style="list-style-type: none">• Alternatives Analysis and Environmental Assessment for the Improvement of Facilities for High Occupancy Vehicles at and near the Interchange of I-405 and SR-55, Orange County Transportation Authority, CA• Bridge and Major Thoroughfare Fee Study, County of San Diego, CA• Central County Corridor Study, Orange County Transportation Authority, Orange, CA• Circulation Element of El Segundo General Plan, El Segundo, CA• Circulation Element of Westminster General Plan, Westminster, CA• Circulation system planning analyses for the Rancho Santa Fe Association, Rancho Santa Fe, CA• Circulation System Planning, East Otay Mesa Specific Plan, San Diego County, CA• Environmental Documentation for California State Route 57 Improvements, Orange County, CA• Front Avenue Corridor Study, Portland, OR• Harbor Boulevard Smart Street Feasibility Study and Environmental Documentation, Garden Grove, Anaheim, Santa Ana, Fountain Valley, Orange County, CA• Moulton Parkway Feasibility Study, Orange County, CA• North-South/Central Orange County Corridor Study, Orange County, CA• On-Call Transportation Planning and Traffic Engineering Services for Caltrans District 11, CA• People-Mover/PRT Feasibility Study, Seattle, WA• Regional Transit Plan, San Diego County, CA• Santa Ana River Crossings Cooperative Study, Orange County, CA• Santa Ana Transportation Corridor Alternatives Analysis and Environmental Documentation, Orange County, CA• Station Area Traffic Analysis, Commuter Rail Service between Oceanside and San Diego, North San Diego County Transit Development Board, Oceanside, CA• Station-Area Traffic Analysis, Commuter Rail Service between Oceanside and Escondido, North San Diego County Transit Development Board, Oceanside, CA• Tri-Met Transit Development Program, Portland, OR <p>HERMAN BASMACI AN, P.E.</p>

Code	Issue	Response

Code	Comment Document
	<p>REVIEW AND CRITIQUE of DEIS FOR LOOP 202 (SOUTH MOUNTAIN FREEWAY)</p> <p>Prepared for Protect Arizona’s Resources and Children (PARC), et al. Phoenix, Arizona</p> <p>by Herman Basmaciyon, P.E. July 17, 2013</p>

Code	Issue	Response

Code	Comment Document
	<div>SECTION I - SUMMARY OF FINDINGS AND CONCLUSIONS</div> <div>Following is a summary of the findings and conclusions of the review of the DEIS for Loop 202 (South Mountain Freeway) focused on traffic, travel forecasting, circulation, and related matters:</div> <div><div>111</div><div>1. The socio-economic data projections presented in the Purpose and Need and elsewhere in the DEIS are faulty.</div></div> <div><div>111</div><div>2. Since socio-economic data are the starting point for the MAG Travel Model, the travel-related forecasts presented in the Purpose and Need and elsewhere in the DEIS are faulty.</div></div> <div><div>112</div><div>3. The forecast of vehicle miles of travel (VMT) lacks credibility. The DEIS states that VMT will grow at a higher rate compared to population and employment growth. This premise is contrary to actual national trends which uniformly show decreases in VMT. Moreover, in the DEIS the methodology used for computation of VMT is not adequately explained.</div></div> <div><div>113</div><div>4. As presented in the DEIS, the Purpose and Need defines the need as “completing the Regional Freeway System,” “adding capacity to the regional freeway and arterial system,” and “serving travel needs in the Southwest area.” No compelling need specifically for the South Mountain Freeway (SMF) is presented in the Purpose and Need.</div></div> <div><div></div><div>5. The Description of the Proposed Action in the Summary Chapter of the DEIS fails to provide details essential for informed decision-making.</div></div> <div><div></div><div>6. Some reasonable and feasible alternatives were not considered in the DEIS or were improperly eliminated early in the screening process.</div></div> <div><div></div><div>7. Since the evaluation and selection of alternatives is based largely on the travel forecasts (among other considerations), the evaluations and selection are fatally flawed. As stated in Item 2 above, the travel forecasts were prepared based on faulty socio-economic forecasts.</div></div> <div><div></div><div>8. Some impacts, including impacts on the arterial street system adjoining proposed interchanges, construction impacts, and the impacts of truck traffic are not addressed at all or are not adequately addressed in the DEIS.</div></div> <div><div></div><div>Review and Critique of DEIS for Loop 202 (SMF) Page 1</div></div>

Code	Issue	Response
111	Purpose and Need	<p>The analyses in the Draft Environmental Impact Statement used socioeconomic and traffic projections at the regional analysis zone and traffic analysis zone levels. At the time of publication of the Draft Environmental Impact Statement, Census 2010-based socioeconomic data at the regional analysis zone and traffic analysis zone levels had not been adopted by the Maricopa Association of Governments and were not available to the project team. Therefore, the data used in the Draft Environmental Impact Statement were the most appropriate information available.</p> <p>The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future.</p>
112	Traffic	<p>The local conditions and setting of the Phoenix metropolitan area are not consistent with areas of high-density cities in other parts of the country. In Maricopa County, daily vehicle miles traveled levels increased by almost 2 percent between 2011 and 2012, and the 2012 daily vehicle miles traveled are approaching the prerecession peak in 2007. (<i>Source:</i> the Arizona Department of Transportation’s Multimodal Planning Division’s Highway Performance Monitoring System Data for calendar years 2012 and 2011).</p>
113	Purpose and Need	<p>The actual need defined in Chapter 1 of the Draft Environmental Impact Statement is based on socioeconomic factors (see page 1-11) and on regional transportation demand and existing and projected transportation system deficiencies (see page 1-13). The proposed action is the construction and operation of a major transportation facility. Chapter 1, <i>Purpose and Need</i>, defines the need or the problem the proposed action would solve. Chapter 3 evaluates alternatives for addressing this need. The responsiveness of the proposed freeway to the purpose and need criteria is presented in the Draft Environmental Impact Statement, beginning on page 3-27.</p>

Code	Comment Document
	<div>SECTION I - SUMMARY OF FINDINGS AND CONCLUSIONS</div> <div>Following is a summary of the findings and conclusions of the review of the DEIS for Loop 202 (South Mountain Freeway) focused on traffic, travel forecasting, circulation, and related matters:</div> <div><div>114</div><div>115</div><div>116</div><div>117</div><div>1. The socio-economic data projections presented in the Purpose and Need and elsewhere in the DEIS are faulty.</div><div>2. Since socio-economic data are the starting point for the MAG Travel Model, the travel-related forecasts presented in the Purpose and Need and elsewhere in the DEIS are faulty.</div><div>3. The forecast of vehicle miles of travel (VMT) lacks credibility. The DEIS states that VMT will grow at a higher rate compared to population and employment growth. This premise is contrary to actual national trends which uniformly show decreases in VMT. Moreover, in the DEIS the methodology used for computation of VMT is not adequately explained.</div><div>4. As presented in the DEIS, the Purpose and Need defines the need as “completing the Regional Freeway System,” “adding capacity to the regional freeway and arterial system,” and “serving travel needs in the Southwest area.” No compelling need specifically for the South Mountain Freeway (SMF) is presented in the Purpose and Need.</div><div>5. The Description of the Proposed Action in the Summary Chapter of the DEIS fails to provide details essential for informed decision-making.</div><div>6. Some reasonable and feasible alternatives were not considered in the DEIS or were improperly eliminated early in the screening process.</div><div>7. Since the evaluation and selection of alternatives is based largely on the travel forecasts (among other considerations), the evaluations and selection are fatally flawed. As stated in Item 2 above, the travel forecasts were prepared based on faulty socio-economic forecasts.</div><div>8. Some impacts, including impacts on the arterial street system adjoining proposed interchanges, construction impacts, and the impacts of truck traffic are not addressed at all or are not adequately addressed in the DEIS.</div></div> <div>Review and Critique of DEIS for Loop 202 (SMF) Page 1</div>

Code	Issue	Response
114	Purpose and Need	As pointed out on page S-1, in the sidebar, “ <i>What you will find in the Summary chapter,</i> ” the text in the Summary is not the “final word,” and readers are urged to turn to the main text when questions about Summary content arise.
115	Alternatives	In accordance with the National Environmental Policy Act, a range of reasonable action alternatives to carry forward for further analysis was determined through application of multidisciplinary criteria in a logical, step-wise progression. Alternatives were not disposed of or dismissed without a thorough evaluation using the multidisciplinary criteria outlined in the alternatives development and screening process presented in Chapter 3 of the Draft Environmental Impact Statement. The preferred alternative was the outcome to this process. Text beginning on page 3-26 of the Draft Environmental Impact Statement establishes conclusions associated with the process.
116	Traffic	The Federal Highway Administration and the U.S. Environmental Protection Agency approved the air quality conformity determination that includes the Maricopa Association of Governments regional travel demand model that produced the traffic projections used in the traffic analysis for the project (see page 3-27 of the Draft Environmental Impact Statement). Traffic projections are regularly updated by the Maricopa Association of Governments. The traffic projections in the Draft Environmental Impact Statement are from a model adopted in 2011. The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11.
117		See responses to specific comments following.

Code	Comment Document
118	9. Even assuming arguendo that the demographics used to demonstrate the need for the project are accurate (they are not), none of the Action Alternatives considered will alleviate the anticipated capacity deficiencies identified in the Purpose and Need. Despite the expenditure of about \$2 billion to \$3 billion to build the South Mountain Freeway and despite the displacement of many residences and business establishments, there will be capacity deficiencies at levels comparable to the No Action Alternative on freeways and arterials throughout the Metropolitan Area and on the South Mountain Freeway itself.
119	10. Appropriate mitigation measures are not proposed to mitigate the impacts of the Action Alternatives.
120	11. Based on these traffic and circulation considerations, none of the Action Alternatives should have been selected as the Preferred Alternative. Indeed, when correct socio-economic data is used, the No Action Alternative largely achieves the desired outcomes without exorbitant costs and/or negative impacts.
	Supporting information for the summary of findings and conclusions is presented in Section II of this report. Exhibits are presented following the last page of Section II.
	Review and Critique of DEIS for Loop 202 (SMF) Page 2

Code	Issue	Response
118	Purpose and Need	Chapter 1 shows that there is a need for a major transportation facility (an action alternative) within the Study Area today and that without a major transportation facility in the Study Area in the future (the No-Action Alternative), the region would continue to suffer even greater congestion, traffic delays, and impacts on the movement of people and goods and the delivery of services. Capacity deficiencies would be substantially greater in the foreseeable future under No-Action when compared against the action alternatives.
119	Impacts	The comment provides no specifics. The Arizona Department of Transportation and Federal Highway Administration have included mitigation measures based on the level of impact associated with the proposed action. These mitigation measures have been coordinated and reviewed by local, regional, State, and federal agencies. Specific responses are made to specific comments later in this document.
120	Alternatives	The Arizona Department of Transportation, with concurrence from the Federal Highway Administration, has determined that the proposed freeway (as made up by the W59 and E1 Alternatives) is the appropriate solution to the transportation problem identified in the Draft Environmental Impact Statement. All of the alternatives were subject to a thorough evaluation using a multidisciplinary set of criteria in accordance with National Environmental Policy Act and Federal Highway Administration guidance.

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Comment Document

SECTION – II SUPPORTING INFORMATION
FOR THE SUMMARY OF FINDINGS AND CONCLUSIONS

In this Section of the report, information is presented to support each of the numbered items 1 through 11 in Section I.

121

1. **The socio-economic data projections presented in the Purpose and Need and elsewhere in the DEIS are faulty.** The socio-economic data used in the DEIS was developed by MAG, relying primarily on information from the 2005 special census and not considering the 2010 U.S. Census. As a result, MAG’s 2035 forecasts of population, households, and employment are overstated. The procedure MAG used to prepare the forecasts is explained below in a direct quote from the Traffic Overview Report.

A special census was conducted for Maricopa County in 2005 to capture the boom in population, housing, and employment that much of the region experienced during the first half of the decade. In 2007, MAG released socioeconomic projections for Maricopa County based on the results of the 2005 census through 2030. In 2009, MAG subsequently extended these projections through 2035. Table 3 presents the projections for Maricopa County.

Table 3. Projected Growth in Population, Housing, and Employment in Maricopa County, 2005–2035

Year	Population	Housing	Employment
2005	3,681,000	1,480,000	1,748,000
2010	4,216,000	1,685,000	2,157,000
2020	5,230,000	2,104,000	2,788,000
2030	6,136,000	2,502,000	3,379,000
2035	6,545,000	2,676,000	3,600,000

Source: Maricopa Association of Governments, 2007 and 2009

Based on the 2010 U.S. Census data, which should have been reflected in the DEIS, it is obvious that MAG’s forecast of socio-economic data based on the 2005 special Census were too high by a large margin. The following table, presents a comparison of MAG’s 2010 forecast to actual data from the 2010 U.S. Census.

Code	Issue	Response
121	Purpose and Need	<div><p>The analyses in the Draft Environmental Impact Statement used socioeconomic and traffic projections at the regional analysis zone and traffic analysis zone levels. At the time of publication of the Draft Environmental Impact Statement, Census 2010-based socioeconomic data at the regional analysis zone and traffic analysis zone levels had not been adopted by the Maricopa Association of Governments and were not available to the project team. Therefore, the data used in the Draft Environmental Impact Statement were the most appropriate information available.</p><p>The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future.</p><p>Chapter 1 shows that there is a need for a major transportation facility (an action alternative) within the Study Area today and that without a major transportation facility in the Study Area in the future (the No-Action Alternative), the region would continue to suffer even greater congestion, traffic delays, and impacts on the movement of people and goods and the delivery of services. The Arizona Department of Transportation, with concurrence from the Federal Highway Administration, has determined that the proposed freeway (as made up by the W59 and E1 Alternatives) is the appropriate solution to the transportation problem identified in the Draft Environmental Impact Statement.</p></div>

Code

Comment Document

Comparison of 2010 Census Data to MAG/DEIS Growth Projections, 2005-2010

TOTAL	2005 Actual	2010 Projected	2005-2010 Projected		2010 Actual	2005-2010 Actual	
			Annual Growth Rate			Annual Growth Rate	
Population - County	3,681,025	4,216,499	2.75%		3,817,117	0.73%	
Population - Study Area	1,951,251	2,274,221	3.11%		2,117,619	1.65%	
Total Housing Units - County	1,479,767	1,685,134	2.63%		1,639,279	2.07%	
Total Housing Units - Study Area	471,484	589,087	4.55%		478,340	0.29%	

MAG’s forecast of Maricopa County population for 2010 is 4,216,499 compared to the actual U.S. Census population of 3,817,117. The MAG forecast is too high by approximately 400,000, or about a 10% overstatement compared to the actual 2010 U.S. Census population. Housing units for Maricopa County are overestimated by about 3%. Population for the Study Area is overestimated by about 7%, and housing units for the Study area are overestimated by MAG by about 23%. Likewise there are large discrepancies in the forecast and actual annual growth rates between 2005 and 2010 in all categories.

Because of these inaccuracies in the MAG socio-economic forecasts even for a short term of five years (2005 to 2010), the long term forecasts for a 30-year period (2005 to 2035) are substantially overstated and are not reliable. If the DEIS had taken into account the information from the 2010 U.S. Census, the 2035 socio-economic forecasts would have started at a lower reference point for 2010. The resulting 2035 forecasts would have been lower even if all other procedures and modeling parameters were unchanged from those used in the 2007/2009 MAG forecasts.

2. Since socio-economic data are the starting point for the MAG Travel Model, the travel-related forecasts presented in the Purpose and Need and elsewhere in the DEIS are faulty. The DEIS should have presented travel forecasts based on correct socio-economic data in all affected text, tables and figures in the DEIS. Faulty travel forecasts affect the Air Quality and Noise impact analyses in addition to the analysis of traffic and circulation impacts.

3. The forecast of vehicle miles of travel (VMT) lacks credibility. The DEIS states that VMT will grow at a higher rate compared to population and employment growth. This premise is contrary to actual national trends which uniformly show decreases in VMT. Moreover, in the DEIS the methodology used for computation of VMT is not adequately explained. Figure 1-4 in the Purpose and Need chapter of the DEIS indicates that the number of daily vehicle miles of travel (VMT) will be approximately 185,000,000 and that VMT growth will outpace the growth in population, employment and housing units. This premise is contradictory to the following quote from the Traffic Overview Report (Page 2-5).

Review and Critique of DEIS for Loop 202 (SMF)

Page 4

Code	Issue	Response
122	Purpose and Need	<p>The historical growth in the Maricopa Association of Governments region is discussed in the Draft Environmental Impact Statement, beginning on page 1-5. Critical factors such as available land, mild climate, affordable cost of living, and employment opportunities that led to the historical growth rates in the region remain unchanged.</p> <p>The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future.</p>
123	Purpose and Need	<p>The analyses in the Draft Environmental Impact Statement used socioeconomic and traffic projections at the regional analysis zone and traffic analysis zone levels. At the time of publication of the Draft Environmental Impact Statement, Census 2010-based socioeconomic data at the regional analysis zone and traffic analysis zone levels had not been adopted by the Maricopa Association of Governments and were not available to the project team. Therefore, the data used in the Draft Environmental Impact Statement were the most appropriate information available.</p> <p>The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future.</p>

Code	Comment Document
123	<p><i>“Historical and Projected Travel in the MAG Region</i></p> <p><i>Historical population growth in the region (see Table 2) greatly pressured the region’s transportation system. As shown in Table 7, the growth in travel, as measured in vehicle miles traveled (VMT), has mirrored the growth in population in Maricopa County (an annual compound growth rate of approximately 5.4 percent). In 2010, travel demand reached 101 million VMT per day (MAG 2010a) and is projected to reach 185 million VMT per day in 2035 (MAG 2010a).”</i></p> <p>The growth in VMT from 101 million in 2010 to 185 million in 2035 would represent an annual compound growth rate of about 2.5%. On the other hand, Table 20-4 on Page 20-8 (Exhibit 1) of the RTP states that in 2030 VMT will be approximately 139,740,000 if the RTP improvements are implemented. Accordingly, the 2035 VMT (per the DEIS) of 185,000,000 would represent a compound growth rate of about 7% per year for the 5 years between MAG’s 2030 VMT forecast and the 2035 VMT forecast in the DEIS. These apparent discrepancies amongst the various sources cited cast serious doubt on the credibility of the VMT estimate presented in the DEIS. Notwithstanding the foregoing, if correct socio-economic data forecasts were used in the DEIS, the 2035 VMT would have been even lower.</p> <p>ADOT’s over-statement of VMT in the DEIS is further compounded when viewed in the context of recent travel trends and forecasts. Travel surveys nationally and in the MAG region indicate that travel statistics such as trip length, VMT per person, and VMT per household have actually decreased in recent years or have been steady. According to the National Household Travel Survey (NHTS), which is a periodic travel survey sponsored by the US DOT, the average vehicle trip length was 9.9 miles in 2001 and 9.7 miles in 2009 (Table 3, Page 10) (see Exhibit 2). Since the 95% confidence interval stated by the survey is 0.2, statistically there was no change in the average trip length. Also the number of daily vehicle trips per household dropped from 5.95 in 2001 to 5.66 in 2009. Since the confidence interval in this case is .06, the decrease is statistically significant. Figure 6, Page 32 (Exhibit 3) indicates that average time spent in vehicles and miles traveled were lower in metropolitan areas in all population ranges and in rural areas.</p> <p>MAG was a participant in the 2009 NHTS Survey (surveys were conducted between April 2008 and April 2009) and augmented the national data base by added household surveys within the MAG Region. MAG documented the results of the survey in its publication “MAG 2008 NHTS Dataset for the MAG Region.” Table 7 on Page 107 (Exhibit 4) of this publication daily trip rates in the MAG Region are presented. The daily trip rates range from a low of 3.72 on Sunday to</p> <p>Review and Critique of DEIS for Loop 202 (SMF) Page 5</p>

Code	Issue	Response
123 (cont.)		<p>Under the National Environmental Policy Act, it is common for new data to avail itself and to, therefore, update the environmental impact statement as new data become available. It is not a requirement, however, to stop the environmental impact statement process in its entirety to wait for new information to become available. Completing an environmental impact statement under those terms would be quite difficult and, arguably, the public would not receive benefits associated with a proposed public infrastructure action. In this case, the project team experts were aware that socioeconomic projections were to be made available but it was likely (based on the Draft Environmental Impact Statement content and processes and a qualitative understanding of what the updated information would show and reveal) that conclusions affected by such data would not substantially change. The team undertook a quite acceptable, common, and understood practice of publishing the Draft Environmental Impact Statement while new data was developing and then present the new information in the Final Environmental Impact Statement. The new information would not automatically assume the need for a supplemental document.</p>

Code	Comment Document
123	<p>a high of 7.26 on a Tuesday. The 7-day weekly numerical average is 4.99 vehicle trips per household, and the numerical average of the five weekdays is 5.45 vehicle trips per household. The trip rates in the MAG data set are comparable to the NHTS national rates. The DEIS does not reference the 2009 NHTS results which do not support the projections of VMT levels relied on to support the South Mountain Freeway (SMF).</p> <p>In 2001 MAG conducted the Maricopa Regional Household Travel Survey. A Final Report was prepared making it possible to compare several trip-making characteristics and trends/changes between the 2001 and the 2008/2009 data sets. Trip rates per household for all modes increased between 2001 and 2008/2009 from 7.38 to 10.50, as reported on Page 120 of “MAG 2008 NHTS Dataset for the MAG Region” (Exhibit 5) The duration of trips in 2001 and 2008 (trip length in minutes) appears to be comparable, since the tabulated data for the 2001 survey (Pages 76 through 78 of the Final Report) (Exhibit 6) follows the same curve pattern illustrated in Figure 7-10 in the report “MAG 2008 NHTS Dataset for the MAG Region” (Exhibit 7). Again, comparing MAG data for 2001 and 2009, the drastic increases in VMT presented in the DEIS cannot be supported.</p> <p>Several sources, including the U.S. PIRG Education Fund, the Economist, and the New York Times, have published reports and articles about declining trends in VMT. Some of the downturn or flattening in VMT trends may be attributable to major events such as the recession in the early 1990s, bursting of the high tech bubble, the bursting of the housing bubble, and rises in fuel costs. On the other hand, changes in travel habits and the “travel time budget,” or the concept that the time a driver will devote to driving on any given day is limited, could also have contributed to the flattening or reductions in vehicle miles of travel. In addition, factors to be considered include increased use of on-line shopping, a larger proportion of elderly persons who tend to make fewer, and/or shorter, driving trips, and other factors.</p> <p>The VMT numbers presented in the DEIS are at odds with this generally recognized downward trend in VMT. The reason for this apparent divergence from documented trends is not clear. Was the estimate of VMT for 2035 a direct unadjusted output generated by the MAG Regional Travel model or was it computed by another methodology? If not generated by the model, why not? What was the methodology used? A reliable forecast of VMT is important for the Air Quality impact analysis in addition to the analysis of traffic and circulation impacts.</p> <p>4. As presented in the DEIS, the Purpose and Need defines the need as “completing the Regional Freeway System,” “adding capacity to the regional freeway and arterial system,” and “serving travel needs in the Southwest area.” No compelling need specifically for the South Mountain Freeway (SMF) is presented in the Purpose and Need. The Purpose and Need statement in the DEIS is very general and is focused on the need to add freeway capacity but</p> <p>Review and Critique of DEIS for Loop 202 (SMF) Page 6</p>

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123	<p>not focused on building the SMF. The problems identified that lead to the proposed action (not direct quotes) are:</p> <ul style="list-style-type: none">• Accommodating population and employment growth in the Phoenix Metropolitan Area.• Completing the Regional Freeway and Highway System, that was delineated about 30 years ago.• Providing additional freeway capacity to reduce congestion in the Urban Core.• Serve travel needs in the Southwest portion of the Metropolitan Area. <p>The stated needs point to Regional level problems and not to a specific facility such as the proposed South Mountain Freeway, Loop 202 (SMT). Following is a discussion of each of the stated problems and why they do not define the need for a specific facility:</p> <ul style="list-style-type: none">• There is no question that historically, the Phoenix Metropolitan Area has grown very rapidly. Going forward, however, growth will likely not occur at a steady pace. Undoubtedly, there will be cyclical ups and downs. In the long-range future, the trend will likely be upwards, although it appears that the actual amount and rate of growth reached by the planning horizon year 2035 will be significantly less than forecasted in the DEIS. Nevertheless, in view of the anticipated growth, the case is made in the Purpose and Need (P&N) chapter of the DEIS that the transportation infrastructure needs to be improved. The P&N, however, does not support construction of the SMF (Loop 202), as would be appropriate for a DEIS that may lead to an action, in this case the construction of the freeway.• The justification in the P&N that Loop 202 is in the RTP and has been on the books for 30 years is a self-fulfilling objective. The presentation of historical data in the P&N is beneficial because it gives the public a sense of what has transpired in the last 25 to 30 years. The Purpose and Need for the South Mountain Freeway however, should have been supported, in addition, by specific problems that Loop 202 would reasonably be expected to alleviate or address, since this DEIS is for a proposed implementation action and not for a programmatic action such as the adoption of the RTP.• The P&N emphasizes that additional freeway capacity would be needed in the Phoenix Metropolitan Area. But, the capacity deficiencies are concentrated in the Urban Core and along I-10, I-17, S1, US 60 and other freeways to the east and north. The P&N does not identify the travel components (origin and destination combinations) that Loop 202 would divert away from the freeways that are congested now or are expected to be congested in 2035. The question arises whether all reasonable <p>Review and Critique of DEIS for Loop 202 (SMF) Page 7</p>

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124	Purpose and Need	Chapter 1, <i>Purpose and Need</i> , follows Federal Highway Administration guidance with respect to complying with the National Environmental Policy Act, which is to define the transportation problem. This Draft Environmental Impact Statement chapter analyzing the purpose and need for the proposed action does not identify a specific facility as the solution. That is addressed in Chapter 3. The comment notes that it is unlikely that growth will occur at a steady pace. First, there is no basis upon which this statement is made. Regardless, as illustrated in Chapter 1 of the Draft and Final Environmental Impact Statement, historical growth rates and trends are described that support the idea that growth has not occurred at a steady pace but is subject to external factors such as new technology, changes in market conditions, cost of living. However, the growth model for future planning purposes does take historical growth trends and “level” them out; a common practice in growth models used by metropolitan planning organizations such as the Maricopa Association of Governments.
125	Purpose and Need	Nowhere in the Draft Environmental Impact Statement is reference made that the proposed action is needed to comply with the <i>Regional Transportation Plan</i> . The analysis of purpose and need would have ended the environmental impact statement process at that point if a need in the form of a transportation problem had not been identified, and this is disclosed in the Draft Environmental Impact Statement. As observed in the comment, this information is provided for historical perspective. That is why it is presented in the section, <i>Historical Context of the Proposed Action</i> . By objectively examining travel in the region and establishing need as presented in Chapter 1 of the Draft Environmental Impact Statement, the alternatives process focused on a systematic, sequential, interdisciplinary approach to establishing a range of reasonable alternatives. An incidental benefit of the results as presented in text beginning on page 3-35 is consistency with local planning. In fact, as disclosed in Chapter 1, it is further explained that the analysis of purpose and need would have ended the environmental impact statement process at that point if a need in the form of a transportation problem had not been identified.
126	Purpose and Need	<p>The analyses in the Draft Environmental Impact Statement used socioeconomic and traffic projections at the regional analysis zone and traffic analysis zone levels. At the time of publication of the Draft Environmental Impact Statement, Census 2010-based socioeconomic data at the regional analysis zone and traffic analysis zone levels had not been adopted by the Maricopa Association of Governments and were not available to the project team. Therefore, the data used in the Draft Environmental Impact Statement were the most appropriate information available. The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11.</p> <p>The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future.</p> <p>Information related to the origin and destination, including pass-thru, of vehicles that would use the proposed freeway is presented in Figure 3-18 on page 3-36 of the Draft Environmental Impact Statement.</p>

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	<p>alternatives have been considered in the DEIS, or if they may have been eliminated too early in the tiered screening process. Also please see the next item.</p>
127	<ul style="list-style-type: none">The information in the P&N indicates that congestion on I-10 (Papago) extends to the West almost as far as Loop 101 (Agua Fria) and on I-10 (Maricopa as far South as Loop 202 (Santan) and beyond. Traffic volumes in the P&N (2010 and 2035) indicate that traffic volumes on the north south arterials in the Study Area go up approaching I-10 (Papago) and that traffic on the east-west arterials go up approaching I-10 (Maricopa). Clearly travel from the southwest area is oriented to the north and east, rather than to the west. Since traffic to/from the Southwest area will continue to use the congested portions of I-10, it is unclear how the SMF will alleviate congestion in the urban core.
128	<ul style="list-style-type: none">The north-south portion of Loop 202 (South Mountain), may be beneficial for north-south traffic destined for I-10 because some traffic that would be on the arterials would be able to use Loop 202 instead. However, on I-10, motorists would encounter congestion whether traveling east or west. The east-west portion of Loop 202 would not be an alternative to the congested east-west arterials because there is no north-south access across South Mountain. Therefore, congested arterials such as Baseline Road and other east-west arterials further north are not likely to receive much, if any, benefit from the east-west portion of Loop 202.
129	<p>The P&N should have identified and itemized the problem (s) that create the need for the proposed action in specific terms such as:</p> <ul style="list-style-type: none">Alleviating a specific current or expected future capacity deficiency (for example, I-10 between Point A and Point B) on the freeway system or on the arterials.Providing an adequate roadway network to serve the circulation needs within the Study Area and identifying deficiencies in terms such as Baseline Road between Point A and Point B.Accommodating commuters to/from the Study Area. Number of work trips between the Study Area and other parts of the Metropolitan Area should have been presented to support the need.Serving pass-through truck traffic between major truck origins and destinations. An example might have been: About 1,000 trucks use I-10 through Phoenix now en route between the East Coast and Los Angeles, without stopping in Phoenix. This number is forecast to increase to 4,500 in 2035, contributing to worsening congestion on I-10. <p>In summary, even if the supporting demographic forecasts are presumed accurate, the P&N in the DEIS does not support the construction of SMF (Loop 202). The DEIS should have but failed to identify, let alone analyze, the compelling</p> <p>Review and Critique of DEIS for Loop 202 (SMF) Page 8</p>

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126 (cont.)		In accordance with the National Environmental Policy Act, a range of reasonable action alternatives to carry forward for further analysis was determined through application of multidisciplinary criteria in a logical, step-wise progression. Alternatives were not disposed of or dismissed without a thorough evaluation using the multidisciplinary criteria outlined in the alternatives development and screening process presented in Chapter 3 of the Draft Environmental Impact Statement. The preferred alternative was the outcome to this process. Text beginning on page 3-26 of the Draft Environmental Impact Statement establishes conclusions associated with the process.
127	Purpose and Need	The comment states that “Clearly travel from the southwest is oriented to the north and east, rather than to the west.” First, there is no basis upon which this statement is made. The purpose of a major transportation facility in the Study Area is to help address increased travel from the southwest to the east. The major transportation facility would provide an alternate route to congested portions of Interstate 10. The purpose and need analysis as described in Chapter 1 of the Draft and Final Environmental Impact Statements confirmed the Study Area as the appropriate area in which to define the transportation problem. While other transportation problems may existing in the region’s transportation network, this environmental impact statement process focused appropriately on the identified problem in the southwest region of the Phoenix metropolitan area.
128	Alternatives	<p>The purpose and need analysis as described in Chapter 1 of the Draft and Final Environmental Impact Statements confirmed the Study Area as the appropriate area in which to define the transportation problem. While other transportation problems may existing in the region’s transportation network, this environmental impact statement process focused appropriately on the identified problem in the southwest region of the Phoenix metropolitan area.</p> <p>As stated in text in the Draft Environmental Impact Statement, beginning on page 3-27, the proposed freeway would appropriately shift traffic from some other freeway segments and the arterial network. Figure 3-12, in this section, illustrates positive effects on arterial roads such as the referenced Baseline Road.</p>
129	Purpose and Need	In response to the comment, the reader is referred to both Chapters 1 and 3 of the Draft and Final Environmental Impact Statements. Text in each of these chapters speaks specifically to the context of purpose and need in terms of the four bulleted points in the comment. The proposed freeway would alleviate identified capacity deficiency, would enhance the circulation needs with the Study Area, would serve commuter travel, and would accommodate truck traffic at vehicle mix percentages similar to those percentages found throughout the region’s freeway network.

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	problems and needs in the Study Area that the SMF would be intended to alleviate. Specific evaluation criteria could then have been developed to assess the effectiveness of each alternative to alleviate, wholly or partially, each of the problems in the Study Area. This lack of specificity in the Purpose and Need affects the identification of alternatives and the evaluation of alternatives.
130	5. Some reasonable and feasible alternatives were eliminated early in the screening process, possibly due to the faulty Purpose and Need. With a revised and appropriately framed Purpose and Need, additional alternatives may emerge. On Page 3-3 of the DEIS, the alternatives screening criteria are presented as quoted below.
131	<i>The following general categories reflect the criteria established for the screening process (Alternatives Screening Report [2003]):</i> <ul style="list-style-type: none">➤ ability to satisfy purpose and need➤ ability to minimize impacts on the human and natural environments➤ ability to improve operational characteristics of the region's transportation system➤ degree of public and political acceptability➤ consideration of overall conceptual cost estimates
132	Since one of the criteria is satisfying the Purpose and Need, a faulty Purpose and Need would result in a faulty screening process. In addition, the third bullet item in the criteria is one of the needs identified in the Purpose and Need; it is duplicative and is not a separate and distinct criterion.
133	Alternatives that should have been but were not included in the evaluations or those that should have been evaluated in greater detail include:
134	a) As discussed previously, the No Action Alternative should have been identified as the preferred alternative in the DEIS. The No Action Alternative is dismissed in the DEIS simply because it does not meet the Purpose and Need. Since the Purpose and Need is faulty, this reason for dismissing the No Action Alternative is not defensible. The No Action Alternative would have no physical impacts, including no impact on South Mountain. It may also have beneficial air quality and noise impacts because the No Action Alternative would result in less VMT, compared to the Preferred Action Alternative as indicated by the comparison of VMT for the "RTP 2030" and "No Build" Alternatives presented in the MAG RTP, Table 20-4 on Page 20-8 (Exhibit 1). Notwithstanding, there were other Action alternatives that would have met the Purpose and Need but were not considered in the DEIS or were not adequately addressed.
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130		See response to specific comments below.
131		See response to specific comments below.
132	Purpose and Need	<p>The analyses in the Draft Environmental Impact Statement used socioeconomic and traffic projections at the regional analysis zone and traffic analysis zone levels. At the time of publication of the Draft Environmental Impact Statement, Census 2010-based socioeconomic data at the regional analysis zone and traffic analysis zone levels had not been adopted by the Maricopa Association of Governments and were not available to the project team. Therefore, the data used in the Draft Environmental Impact Statement were the most appropriate information available.</p> <p>The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future.</p> <p>Past determinations surrounding the alternatives development and screening process, including the reasons for the elimination of alternatives, as outlined in Chapter 3 of the Final Environmental Impact Statement, were reviewed for appropriateness based on the new data and were determined to remain appropriate screening determinations.</p> <p>The noted duplicate criterion has been deleted from the Final Environmental Impact Statement.</p>
133		See response to specific comments below.
134	Alternatives	As stated on page 3-40 of the Final Environmental Impact Statement, the No-Action Alternative would not satisfy the purpose and need of the proposed action because it would result in further difficulty in gaining access to adjacent land uses, increased difficulty in gaining access to Interstate and regional freeway systems from the local arterial street network, increased levels of congestion-related impacts, continued degradation in performance of regional freeway-dependent transit services, increased trip times, and higher user costs. Further, the No-Action Alternative would be inconsistent with Maricopa Association of Governments' and local jurisdictions' long-range planning and policies. The No-Action Alternative was included in the Draft and Final Environmental Impact Statements for detailed study to compare impacts of the action alternatives with the consequences of doing nothing (impacts can result from choosing to do nothing).

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135	<p>b) The initial list of modal alternatives does not include a hybrid consisting of freeway spot improvements where needed, new freeway segment (s), more lanes on selected arterials beyond the improvements included in the RTP, additional arterials not included in the RTP. A well-defined hybrid alternative should have been considered and evaluated. An example of a hybrid alternative, that would include some of the features of the Preferred Action Alternative and that would avoid any impacts on South Mountain, is presented in attached Exhibit 8. The salient features of the hybrid alternative would be:</p> <ul style="list-style-type: none">• Construction of a freeway along the alignment of the Preliminarily Selected Action Alternative (59th Avenue/63rd Avenue) between I-10 and W. Carver Road,• Construction of a new four-lane arterial along W. Carver Road between 59th Avenue and 51st Avenue,• Arterial improvements along 51st Avenue between W. Carver Road and W. Pecos Road (extended westerly from the western terminus of Pecos Road),• Construction of a new four-lane arterial between 51st Avenue and the present western terminus of Pecos Road (generally east west along an alignment approximating an extension of W. Pecos Road)• Extensive arterial improvements in the Southwest area. <p>c) Dismissal of all alternatives impacting GRIC land without thorough evaluation is not appropriate. When the complete set of benefits, costs and impacts are assessed one or more alternatives through GRIC may emerge to be a better choice than the Preferred Action Alternative. Alternatives not considered or not evaluated fully include:</p> <ul style="list-style-type: none">• The “Community Alternative” that is depicted in Figure 3-11 on Page 3-25 of the DEIS. This alternative would not have any impacts on South Mountain. An alignment similar to the Community Alternative is shown in an article on the Arizona Republic website. The link to the article is: http://www.azcentral.com/community/ahwatuk/ee/articles/20130308south-mountain-freeway-plan-ignored.html• The various alternatives through GRIC land that parallel W. Pecos Road, depicted in Figure 3-5 on Page 3-7 of the DEIS.
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135	Alternatives	<p>According to 23 Code of Federal Regulations §771.111(f),” the action evaluated in the environmental impact statement must connect logical termini and be of sufficient length to address environmental matters on a broad scope...”. The proposed action should satisfy the project need and should be considered in the context of the local area socioeconomics and topography, the future travel demand, and other infrastructure improvements in the area. A partial freeway from Interstate 10 (Papago Freeway) to Laveen Village is not feasible because it would not meet the proposed freeway’s identified purpose and need.</p> <p>Construction of Carver Road between 59th and 51st avenues is included in the City of Phoenix General Plan transportation element.</p> <p>Improving 51st Avenue between Carver Road and Pecos Road would require permission of the Gila River Indian Community. Any alternative on Gila River Indian Community land must consider tribal sovereignty. Tribal sovereignty is based in the inherent authority of Native American tribes to govern themselves. While this notion of sovereignty is manifested in many areas, generally Native American land is held in trust by the United States. Native American communities have the authority to regulate land uses and activities on their lands. States have very limited authority over activities within tribal land (see page 2-1 of the Final Environmental Impact Statement). From a practical standpoint, this means that the Arizona Department of Transportation and Federal Highway Administration do not have the authority to survey tribal land, make land use (including transportation) determinations directly affecting tribal land, or condemn tribal land for public benefit through an eminent domain process. Based on previous comments from the Gila River Indian Community related to pass-through traffic using 51st Avenue, the Gila River Indian Community would not support any activities that would increase unwanted traffic through its communities.</p> <p>Extending Pecos Road to 51st Avenue would not be feasible because a portion would be located on Gila River Indian Community land, and the Gila River Indian Community has not provided permission to construct a facility on its land. Based on previous comments from the Gila River Indian Community related to pass-through traffic using 51st Avenue, the Gila River Indian Community would not support any activities that would increase unwanted traffic through its communities.</p> <p>Improvements to the arterial street system in the southwestern area (Laveen and Estrella Villages) are planned in the City of Phoenix General Plan.</p> <p>For these reasons, alternatives similar to the hybrid alternative proposed in the comment were eliminated from detailed study.</p>
136	Alternatives	<p>Dismissal of all alternatives affecting Gila River Indian Community land is appropriate. The act by the Gila River Indian Community of not allowing alternatives on its land is sufficient evaluation. The Gila River Indian Community has consistently stated (beginning in 2000, with a Community Council resolution) that it is not interested in an alternative on its land. See Draft Environmental Impact Statement Chapter 2, <i>Gila River Indian Community Coordination</i>.</p>

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	<ul style="list-style-type: none">• The Riggs Road/Beltline Road/51st Avenue Alternative that would avoid any impacts on South Mountain• The Queen Creek Road Alternative that would have no impact on south Mountain
137	<p>c) A depressed freeway alternative along W. Pecos Road in the Eastern Section of the SMF is discussed in the DEIS starting on Page 3-15 and several pages following. In the third tier screening of alternatives, the depressed freeway alternative was dropped from further evaluation because of drainage design complications, greater right-of-way need compared to the rolling profile, more residential displacements, and increased construction and right-of-way costs. In the third tier screening, the decision to construct the SMF as an eight-lane facility (three general purpose lanes plus one high occupancy lane in each direction) had not been made. The reduction of the SMF from a 10-lane facility to an 8-lane facility was made in the fourth tier screening. Therefore, it is unclear if the additional right-of-way need for about 150 acres is in reference to a 10-lane or an 8-lane design. The DEIS should have considered this matter and verify if, in fact, a depressed profile would require 150 acres of additional right-of-way beyond what ADOT has already acquired plus what ADOT would need to acquire to accommodate the 8-lane SMF rolling profile. Since 90% of the cost difference between the rolling and depressed alternatives is attributed to right-of-way, any reductions in right-of-way would make a large difference in cost and in residential displacements. The matter of a depressed profile should have been re-visited after the decision to use an 8-lane cross section to confirm or revise the previous findings based on the 10-lane alignment. This re-visit should have identified the additional parcels that would need to be acquired and the residential displacements.</p> <p>On Page 3-18 of the DEIS, Impacts on Ahwatukee Foothills Village are discussed in the following quote:</p> <p><i>Impacts on Ahwatukee Foothills Village – The public generally perceives that a depressed freeway would reduce and/or eliminate impacts on visual resources and freeway-related noise. Visual and noise-level impacts from operation of the proposed E1 Alternative would, however, still occur and would require mitigation, as would be the case for the at-grade rolling profile.</i></p> <p>It is unclear from the statement in the DEIS if the impacts of the rolling profile and depressed alternatives would be identical or if the depressed alternative would have less impact. The DEIS should have this clear and recognize any advantages the depressed alternative might have, if any. If</p>
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136 (cont.)		Tribal sovereignty is based in the inherent authority of Native American tribes to govern themselves. While this notion of sovereignty is manifested in many areas, generally Native American land is held in trust by the United States. Native American communities have the authority to regulate land uses and activities on their lands. States have very limited authority over activities within tribal land (see page 2-1 of the Draft Environmental Impact Statement). From a practical standpoint, this means that the Arizona Department of Transportation and Federal Highway Administration do not have the authority to survey tribal land, make land use (including transportation) determinations directly affecting tribal land, or condemn tribal land for public benefit through an eminent domain process.
137	Alternatives	All of the design options and refinements (such as tunnel and bridge options and depressed freeway options) considered in the Third-Tier screening were revisited after the determination to change the proposed freeway from ten to eight lanes. The comparisons presented in the Draft Environmental Impact Statement section, <i>Depressed Freeway Options</i> , reflect an eight-lane freeway concept for the at-grade/ elevated profile and the depressed profile.
138		Quote from Draft Environmental Impact Statement.
139	Drainage	As noted on page 3-18 of the Draft Environmental Impact Statement, drainage served as the primary design constraint for the Pecos Road segment of the E1 Alternative. Assessments were performed to determine constructibility and effectiveness in avoiding or reducing impacts and to evaluate whether a depressed profile would generate other desired or undesired outcomes. Based on the results of these assessments, further design options were developed and refined in attempts to reduce impacts on the adjacent community. The modifications incorporated alternative drainage designs, use of retaining walls, and other features to reduce right-of-way requirements.

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	the depressed alternative would have less impact than the rolling profile alternative, less mitigation would be needed.
140	d) The Ray Road and Chandler Boulevard Alternatives were improperly dismissed from further consideration in the second tier screening on the basis of “substantial” impacts that were not quantified in the DEIS. In the western portion of the SMF, several location alternatives and variations were studied in detail. By comparison, in the eastern portion W. Pecos Road became the sole survivor of the screening process very early in the evaluation process.
141	e) In the screening process, the “freeway” alternatives of the westerly extension of the Superstition Freeway, the southerly extension of SR 51, and the southerly extension of I-10 to the Superstition Freeway (extended) were dismissed in the second tier of screening. The rationale for elimination from further consideration was not supported by substantive analysis in the DEIS. If there was any substantive analysis, it should have been presented in the DEIS. Because of the location of these alternatives, there would be no impacts on South Mountain.
142	f) Freeway improvements on the congested freeways in the urban core should have been considered and discussed in the DEIS. Possible improvements to alleviate congestion where the congestion now exists (rather than build the SMF) could include addition of high occupancy/toll lanes (HOT lanes), auxiliary lanes, interchange improvements, and others. If such improvements were deemed to be not feasible after substantive analysis, the conclusions should have been documented more thoroughly in the DEIS along with the rationale for rejecting such alternatives. Because of the location of such improvements, there would be no impacts on South Mountain.
143	g) The I-8/SR 85 Alternative, mentioned on Page 3-9, is dismissed because it does not meet the Purpose and Need for the proposed action. Since the Purpose and Need is faulty, the dismissal of this alternative on the basis of the Purpose and Need is also faulty. The benefits of this alternative, that would avoid any impacts on South Mountain, should have been quantified and presented in the DEIS.
144	h) The development of a complete arterial system in the Southwest area was not considered in the DEIS. As discussed in Item 5.b), the MAG RTP does not indicate any arterial improvements except one new arterial facility in the Southwest area. A complete arterial system would alleviate much of the forecasted congestion in the area and would meet the Purpose and Need objectives of adding capacity and improving circulation in the
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140	Alternatives	In accordance with the National Environmental Policy Act, a range of reasonable action alternatives to carry forward for further analysis was determined through application of multidisciplinary criteria in a logical, step-wise progression. As noted in Table 3-5 on page 3-12 of the Draft Environmental Impact Statement, the Ray Road and Chandler Boulevard alternatives would result in hundreds of residential and business displacements and would split the Ahwatukee Foothills Village. For these reasons, the two alternatives were eliminated from detailed study.
141	Alternatives	In the Eastern Section, the initial screening identified clear, undesirable aspects of the alternatives, with only the E1 Alternative being prudent and feasible. In the Western Section, the three action alternatives studied in detail each had positive and negative aspects, however none were substantial enough to eliminate the alternative (or other alternatives). The Draft Environmental Impact Statement is a summary of technical analyses providing the necessary details associated with the decision-making process. Additional details and quantities are documented in technical reports and memos. Alternatives were not disposed of or dismissed without a thorough evaluation using the multidisciplinary criteria outlined in the alternatives development and screening process.
142	Alternatives	<p>The Draft Environmental Impact Statement is a summary of technical analyses providing the necessary details associated with the decision-making process. Additional details and quantities are documented in technical reports and memos. Alternatives were not disposed of or dismissed without a thorough evaluation using the multidisciplinary criteria outlined in the alternatives development and screening process.</p> <p>Improvements to other freeway corridors such as Interstate 10, other new freeways such as State Route 303 Loop, arterial street improvements, and expansion of the existing bus and light rail systems are included in the <i>Regional Transportation Plan</i>. See discussion beginning on page 1-9 of the Draft Environmental Impact Statement. The analysis of future conditions includes the assumption that all of the planned improvements identified in the <i>Regional Transportation Plan</i> would be in place by 2035. Draft Environmental Impact Statement Chapter 1, <i>Purpose and Need</i>, concludes that, even with these improvement in place, there is a clear need for a major transportation facility in the Study Area.</p>

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143	Alternatives	<p>The analyses in the Draft Environmental Impact Statement used socioeconomic and traffic projections at the regional analysis zone and traffic analysis zone levels. At the time of publication of the Draft Environmental Impact Statement, Census 2010-based socioeconomic data at the regional analysis zone and traffic analysis zone levels had not been adopted by the Maricopa Association of Governments and were not available to the project team. Therefore, the data used in the Draft Environmental Impact Statement were the most appropriate information available.</p> <p>The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the need for the freeway has not changed. The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future.</p> <p>Past determinations surrounding the alternatives development and screening process, including the reasons for the elimination of alternatives, as outlined in Chapter 3 of the Final Environmental Impact Statement, were reviewed for appropriateness based on the new data and were determined to remain appropriate screening determinations. The Interstate 8/State Route 85 Alternative is in place today and will be in place in the future as an alternative route for motorists to use to bypass the entire Phoenix metropolitan area. The alternative serves that purpose, but provides no benefits to support regional travel within the Phoenix metropolitan area. For this reason, it was eliminated from further study.</p>
144	Alternatives	<p>The <i>Regional Transportation Plan</i> is not the primary source of funding for expansion of the arterial street system. Funding for the arterial street system generally comes from the local jurisdiction or through impact fees for development. It is anticipated that the arterial street network in the Study Area will be expanded in this same manner. The Maricopa Association of Governments regional travel demand model includes assumptions related to arterial street expansion based on local jurisdiction general planning. In the case of the Study Area, it is assumed that most of the arterial street network would be built out by 2035. Draft Environmental Impact Statement Chapter 1, <i>Purpose and Need</i>, concludes that, even with these improvement in place, there is a clear need for a major transportation facility in the Study Area.</p> <p>The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future.</p>

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	Southwest area. This alternative would avoid any impacts on South Mountain.
145	In summary, several reasonable and viable alternatives were not considered in the DEIS or were dismissed from further consideration without an appropriate level of analysis, even though many of them would not have any impacts on South Mountain. This is a major deficiency, since a major requirement of the DEIS is that all reasonable alternatives be evaluated with appropriate level of detail.
146	6. The Description of the Proposed Action in the Summary Chapter fails to provide details essential for informed decision-making. The action is described generally as building a freeway in compliance with the RTP. Lacking from the description are the following:
147	<ul style="list-style-type: none">• The typical cross-section of the freeway, preferably with dimensions that ADOT commonly uses, should have been included. Major deviations, if any, from the typical cross-section for each of the three West Alternatives and the single East Alternative should have been identified.
148	<ul style="list-style-type: none">• While at the outset the cross-section was not known, the 10-lane alternative was eliminated in the fourth-tier screening. A freeway with three general purpose (GP) and one High Occupancy Vehicle (HOV) lane in each direction, plus auxiliary lanes where necessary, was established for all alternatives.
149	<ul style="list-style-type: none">• The profile for the freeway should have been described in general terms for each Alternative.
150	<ul style="list-style-type: none">• The location of proposed interchanges for each alternative should have been shown.
151	<ul style="list-style-type: none">• The fact that park-and-ride lots would be provided at/near some or all interchanges, if true, should have been stated. The term park-and-ride appears only once in the Summary (Page S-19) in the context of a mitigation measure for Displacements and Relocations. The term park-and-ride does not appear at all in Chapter 1 (Purpose and Need); it appears three times in Chapter 3 (Alternatives) first on Page 3-6 as part of the discussion of Modal Screening Results, the second time on Page 3-15, Figure 3-8 indicating that the park-and-ride lot at the 40th Street Interchange potentially would be expanded, and for the third time on Page 3-40 in the context of the No-Action Alternative. Thus unless a reader studied Figure 3-8 very carefully, he or she would not be aware of the potential expansion of the park-and-ride lot at the 40th Street Interchange. There is no mention of park-and-ride in the Traffic Overview Report.
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Code	Issue	Response
145	Alternatives	Alternatives were not disposed of or dismissed without a thorough evaluation using the multidisciplinary criteria outlined in the alternatives development and screening process. A thorough feasible and prudent avoidance analysis of the South Mountains was conducted as presented in Chapter 5 of the Draft and Final Environmental Impact Statements and concluded avoidance to the direct use of the resource was not feasible and prudent. In support of this response and given the concerns about the South Mountains, consider the following review from the U.S. Department of the Interior on the Draft Environmental Impact Statement: “Following our review of the Section 4(f) Evaluation, we concur that there is no feasible or prudent alternative to the Preferred Alternative selected in the document, and that all measures have been taken to minimize harm to these resources.” The complete letter can be found in Appendix 7, Volume III, on page B4.
146	Purpose and Need	As pointed out in the Draft Environmental Impact Statement on page S-1, in the sidebar, “ <i>What you will find in the Summary chapter,</i> ” the text in the Summary is not the “final word,” and readers are urged to turn to the main text when questions about Summary content arise. It is clear, as pointed out in Chapter 3, <i>Alternatives</i> , that a beneficial outcome of the alternatives screening process—a “... logical, sequential, step-by-step process using data and expertise from multiple disciplines ...” (page 3-27)—was that the mode determined to be appropriate for addressing the identified transportation problem was a highway that, in turn, was consistent with local and regional plans (as supported by stakeholder jurisdictions). Nowhere in the Draft Environmental Impact Statement is reference made that the proposed action is needed to comply with the <i>Regional Transportation Plan</i> . The analysis of the proposed action’s purpose and need would have ended the environmental impact statement process at that point if a need in the form of a transportation problem had not been identified, and this is disclosed in the Draft Environmental Impact Statement.
147	Design	A typical section is provided in Figure S-9 on page S-10 of the Draft Environmental Impact Statement. As noted on page S-8 at the end of the section, <i>Action Alternatives</i> , “Chapter 3, <i>Alternatives</i> , has detailed descriptions of features of the alternatives.” This information begins on page 3-40 of the Draft Environmental Impact Statement.
148	Design	Agree.
149	Design	This information is presented in Chapter 3 of the Draft Environmental Impact Statement. Descriptions of the horizontal and vertical alignments of the action alternatives are provided, beginning on page 3-40. Graphical depictions are shown in Figures 3-20 to 3-25.
150	Design	This information is presented in the Summary Chapter of the Draft Environmental Impact Statement; see Figure S-8. It is also presented in Chapter 3; see Figure 3-28.
151	Design	The inclusion of park-and-ride lots is not part of the scope of the proposed action. No new park-and-ride lots are proposed as part of the proposed action. Locations of future park-and-ride lots would be determined by the City of Phoenix and Valley Metro. As described in the responses above, the elements of the proposed freeway and the potential action alternatives were described in the Draft Environmental Impact Statement.

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	<p>For the public in general, the Regional Transportation Plan (RTP) and complying with the RTP are abstract and perhaps foreign concepts. The Description of the Preliminarily Proposed Action should have had sufficient information to help the public visualize what is being proposed on the ground.</p>
152	<p>7. Since the evaluation of alternatives is based on the travel forecasts (among other considerations), the evaluations are faulty. As stated in Item 2 above, the travel forecasts, in turn, are faulty because they are based on faulty socioeconomic forecasts. The MAG travel forecasting model was run with faulty data inputs. As a result, all figures and tables in the DEIS that present data from the model are incorrect, resulting in conclusions in the DEIS that cannot be supported by reliable analysis. The faulty travel forecasts affect the Air Quality and Noise impact analyses, as well, because they rely on traffic forecasts, as one of the inputs. On the basis of this fatal flaw alone, the DEIS should be thrown out, and the analysis should be done properly from the beginning.</p>
153	<p>8. Some potential impacts, including impacts on the arterial street system adjoining proposed interchanges, construction impacts, and the impacts of truck traffic are not addressed at all or are not addressed in detail sufficient for a DEIS for an Action Alternative (as opposed to a programmatic action such as the adoption of the RTP).</p>
154	<p>a) The DEIS does not present an analysis of traffic impacts on arterials in the vicinity of the proposed interchanges and impacts on local access. A specific example of this type of deficiency, that may be applicable elsewhere in the Study Area, is the lack of analysis as to how W. Pecos Road would be impacted by the Proposed Action. With the Proposed Action, the South Mountain Freeway (SMF) would obliterate and replace existing Pecos Road (described in the DEIS as Alternative E1); access to the street system in the area would be provided via interchanges at 40th Street, 24th Street, Desert Foothills Parkway, and 17th Avenue. There will be no interchange at 32nd Street. Under existing conditions, a signalized intersection at the intersection of W. Pecos Road and 32nd Street provides access to the community on the north side of W. Pecos Road. This access for the community will not be available when the SMF is built, and traffic that now uses 32nd Street will have to use other routes. Please see Item c) on Page 16 for more details about how this matter should have been addressed in the DEIS.</p> <p>A similar problem will be created at the western terminus of W. Pecos Road at 27th Avenue which is the sole access for the existing Foothill Reserve and Calabrea communities. When the SMF is constructed as proposed, this access will no longer be available and existing traffic will be forced to use another route. ADOT has proposed to construct an extension of Chandler Boulevard, between its existing terminus at 19th Avenue and 27th Avenue, to provide access to Foothill Reserve and</p> <p>Review and Critique of DEIS for Loop 202 (SMF) Page 14</p>

Code	Issue	Response
152	Purpose and Need	<p>The analyses in the Draft Environmental Impact Statement used socioeconomic and traffic projections at the regional analysis zone and traffic analysis zone levels. At the time of publication of the Draft Environmental Impact Statement, Census 2010-based socioeconomic data at the regional analysis zone and traffic analysis zone levels had not been adopted by the Maricopa Association of Governments and were not available to the project team. Therefore, the data used in the Draft Environmental Impact Statement were the most appropriate information available.</p> <p>The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future.</p> <p>All impact analyses affected by the updated socioeconomic data, including air quality and noise, were updated accordingly and those updates are reflected in the Final Environmental Impact Statement. Determinations relating to the identification of the Preferred Alternative were also confirmed in accounting for the new population, employment, housing, and traffic projections.</p>
153		See responses to specific comments below.
154	Traffic	<p>The determination to not include an interchange at 32nd Street was made in coordination with the City of Phoenix (see Figure 3-8 on page 3-15 of the Draft Environmental Impact Statement). The interchange would have displaced over 100 homes and would have been located near an existing high school.</p> <p>In 2006, the City of Phoenix conducted a traffic circulation study to evaluate the impacts of the proposed freeway on the local street system, including the shift of access to Foothills Reserve and Calabrea from Pecos Road to Chandler Boulevard. The City study found no adverse effects on the local street system from the freeway (see Appendix 3-1 in the Final Environmental Impact Statement).</p>

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155	<p>Calabrea. The DEIS should have analyzed the traffic implications of this rerouted traffic on 17th Avenue, Chandler Boulevard, and major intersections along the route, using methodology and data as described in Item c) on Page 16. The need for traffic controls (traffic signals, stop signs, and others) should have been identified in the DEIS.</p>
156	<p>This extension of Chandler Boulevard is identified as a “Newly constructed local street” in Figure 3-33 on Page 3-57 of the DEIS. East of 19th Avenue, Chandler Boulevard is constructed with a five-lane cross-section (two lanes in each direction, plus a two-way left-turn lane in the center. The DEIS should have stated that if the extension of Chandler Boulevard were to be constructed, it should continue the existing five-lane cross-section. This cross section would be necessary in order to accommodate the traffic increases due to the re-routing of Foothill Reserve and Calabrea traffic, as well as other traffic that would use Chandler Boulevard if it were to be constructed. Such other additional traffic would include:</p> <ul style="list-style-type: none">• Traffic to and from the 247 acres of vacant land the City of Phoenix has purchased that lies north of Chandler Boulevard, between 19th and 27th Avenues. In addition to about 100 acres of open space, under consideration for this land would be 40 to 60 acre community park, a library, and other uses that may be identified in the City’s future planning and community outreach processes.• Traffic to and from the vacant land (bounded by Chandler Boulevard on the north, W. Pecos Road on the south, 19th Avenue on the east, and 27th Avenue on the west) that was rezoned by the City of Phoenix to permit 11 acres of commercial uses, 11 acres of multi- family housing, and 650 to 1,050 single-family residences.• Any other traffic increases that would affect Chandler Boulevard.
155	
157	<p>Even with the construction of Chandler Boulevard between 19th Avenue and 27th Avenue, residents in Foothill Reserve and Calabrea will incur substantial out-of-direction travel and additional travel time to access the SMF, compared to the present route. To get home, these residents will have to exit the SMF at 17th Avenue, travel north on 17th Avenue to Chandler Boulevard, then southwest on Chandler Boulevard to connect with the street system within the two communities. The DEIS should have quantified the added time and distance of travel and should have considered the construction of a two lane access road between 17th Avenue and 27th Avenue on the north side of the SMF. In addition to facilitating access for the residents of Foothill Reserve and Calabrea, such an access road would help reduce future traffic on 17th Avenue and would help maintain emergency vehicle response times at levels comparable to existing.</p>
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Code	Issue	Response
155	Design	The Chandler Boulevard extension was developed in close coordination with the City of Phoenix and supports the ultimate lane configuration and planned development in the area.
156	Design	Additional local roads would be constructed along with the development of this land (as identified in the City’s General Plan).
157	Design	Reasonable access would remain to the noted developments. The travel time savings as a product of using the South Mountain Freeway in comparison to use of Pecos Road would likely offset any additional travel time attributable to the change in access. Emergency responders would address the construction of the proposed freeway by amending the local emergency response plan to include the facility.

Code	Comment Document
158	<p>The SMF will cause similar alterations in local traffic patterns elsewhere along the route, primarily in the Western portion of the SMF. The DEIS should have discussed traffic impacts in the vicinity of all interchanges along the proposed action, with appropriate analysis, similar to that described in Item c), below.</p>
159	<p>b) The DEIS does not indicate what type of interchange would be constructed at the interchanges along W. Pecos Road. Because there would be no access to the Gila River Indian Community (GRIC) on the south side, neither of the two typical interchanges depicted on Page 3-14 of the DEIS, “Diamond Interchange” and “Single Point Urban Interchange,” would be applicable. The DEIS should have indicated the type of interchange to be provided, at least conceptually and with a simple graphic.</p>
160	<p>c) The DEIS should have presented recent traffic volume counts for W. Pecos Road (between I-10 and 27th Avenue) and turning movement counts at the existing signalized intersections at 40th Street, 32nd Street, 24th Street, Desert Foothills Parkway, and 17th Avenue. Traffic counts should also have been made at major intersections along the path motorists would use to access Foothill Reserve and Calabrea when the construction of the SMF would cut off the present access via W. Pecos Road/ 27th Avenue. Then it should have discussed the impacts on existing traffic due to the loss of access at 32nd Street and 27th Avenue and how existing traffic patterns would change. Then, 2035 peak hourly traffic volumes at the interchanges should have been presented so that the public could be informed of how present routings would be affected and what the impacts would be in 2035. The impacts on the cross streets are not dependent on the specific design details and can be evaluated based on the traffic volume forecasts from the MAG travel model. Analyses with similar methodology should have been performed at interchanges along the entire route of the SMF.</p>
161	<p>d) The DEIS should have discussed how the Proposed Action would affect emergency vehicle access times for the communities now served by the signalized intersection at Pecos Road/32nd Street and via W. Pecos Road/27th Avenue (Chandler Boulevard). Extending this example, the DEIS should have discussed how emergency vehicle access would be affected at all locations along the proposed action where the arterial street pattern would be altered.</p>
162	<p>e) With the Proposed Action, the eastbound left-turn and westbound right turn direct access to the park-and-ride facility north of W. Pecos Road at 40th Street will be lost, shifting the park-and-ride traffic to the two access points via 40th Street. The southern access driveway is less than 300 ft (center-to-center) north of Pecos Road. The construction of the freeway</p>
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Code	Issue	Response
158	Traffic	<p>The proposed freeway would include improvements along arterial streets at interchange locations to facilitate the movement of traffic on, off, and across the freeway. The arterial street improvements are included within the right-of-way footprint used for the analysis of impacts.</p>
159	Traffic	<p>The third bullet in the third column on page 3-51 of the Draft Environmental Impact Statement states that “The diamond interchange configuration (see sidebar on page 3-14) was used to evaluate service traffic interchange needs.”</p> <p>The assumption that there would be no access to the Gila River Indian Community to the south is incorrect. At 40th Street, there is an existing road to the south, and the planned interchange at that location would provide access onto Gila River Indian Community land. Similarly, the interchanges at 24th Street, Desert Foothills Parkway, and 17th Avenue would be constructed to allow for future connections from Gila River Indian Community land. The initial layout would be similar to the interchanges at State Route 202L (Red Mountain Freeway) and Dobson Road. Figure 3-28 indicated whether the interchanges would include full access or half access.</p> <p>In some locations, a single-point urban interchange or other interchange type may be used to address higher traffic volumes. The determination of the interchange type would be made during final design in coordination with the local jurisdiction.</p>
160	Traffic	<p>Existing traffic volumes on the City of Phoenix’s streets is available at the City’s Web site, <phoenix.gov/streets/traffic/volumemap>.</p> <p>In 2006, the City of Phoenix conducted a traffic circulation study to evaluate the impacts of the proposed freeway on the local street system. The City study found no adverse effects on the local street system from the freeway (see Appendix 3-1 in the Final Environmental Impact Statement).</p>
161	Traffic	<p>Emergency responders would address the construction of the proposed freeway by amending the local emergency response plan to include the facility. This would include emergency response on the freeway and alternative routes for diversion of traffic in the event that an incident occurred along the freeway.</p> <p>As concluded in the section, <i>Social Conditions</i>, in Chapter 4 of the Draft Environmental Impact Statement, response times for police, fire, and medical emergency services would be faster when compared with response times under the No-Action Alternative. Circulation on major arterial streets would be improved through better distribution of traffic onto the overall transportation network, the provision of alternative routes, and through localized operational improvements such as grade separations and planned interchanges.</p>
162	Traffic	<p>In addition to access from 40th Street, access to the park-and-ride lot would be provided off of the westbound on-ramp. This is similar to the park-and-ride operations at Happy Valley Road and Interstate 17. Bus operations and circulation would continue to operate as-is today. Traffic operational characteristics along 40th Street and at the Cottonwood Lane intersection would not be adversely affected by the freeway. The park-and-ride lot has been expanded to its ultimate configuration.</p>

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	<p>ramps will shorten the spacing between the junction of the westbound ramp terminal and the southern access driveway for the park-and-ride lot. The impacts to traffic operations along 40th Street, impacts to park-and-ride access, impacts on bus operations, impacts at the intersection of 40th Street/E Cottonwood Lane/bus access to park-and-ride should have been evaluated, both for existing and 2035 traffic volumes. The long-term expansion of the park-and-ride facility should also have been discussed.</p>
163	<p>f) The DEIS should have discussed how access would be provided to the existing U-Haul Dealer and storage facility on the south side of Pecos Road, now accessed directly via the signalized intersection at 32nd Street. Since there will be no interchange at 32nd Street with the Proposed Action, this property will become land-locked. It is unclear based on the information in Tables 4-12 and 4-13, (Pages 4-39 and 4-42, respectively in the DEIS, if this facility is being displaced.</p> <p>g) Construction period impacts are not adequately addressed in the DEIS. Solely from the standpoint of transportation, traffic, and circulation matters, the discussion provided in Section 4 under “Temporary Construction Impacts” and “Materials Sources and Waste Material” on Pages 4-161 through 4-164 in the DEIS is very general. While the estimate of “borrow” material is site-specific, the amount is expressed in millions of cubic yards, and not by some other measurement more easily understood by the public. The discussion of construction impacts should have been expanded to include more site specific information and should have included such items as:</p> <ul style="list-style-type: none">• the number of truckloads of export or import materials• haul routes (the route trucks will use to haul away excess dirt or bring in dirt) during the grading of the route• number of trucks to bring in aggregate, asphalt/concrete, reinforcing steel, and any other construction materials• duration of construction• how traffic will be handled on the existing street system when useable segments of the freeway are opened to traffic prior to the completion of the entire freeway• impacts on traffic on I-10 (both Papago and Maricopa) during the construction period• detour routes and the traffic impacts of the detours• other considerations
164	<p>h) The Construction Sequencing described in the DEIS (Page 3-59) is not consistent with Figure 8-4, the Plan Phasing - Freeways/Highways in the 2010 Update of the Regional Transportation Plan (RTP) (Exhibit 9). The RTP presents the following phasing schedule:</p>
	<p>Review and Critique of DEIS for Loop 202 (SMF) Page 17</p>

Code	Issue	Response
163	Traffic	The determination to not include an interchange at 32nd Street was made in coordination with the City of Phoenix (see Figure 3-8 on page 3-15 of the Draft Environmental Impact Statement). The interchange would displace more than 100 homes and would have been located near an existing high school. In 2006, the City of Phoenix conducted a traffic circulation study to evaluate the impacts of the proposed freeway on the local street system, including the shift of access to Foothills Reserve and Calabrea from Pecos Road to Chandler Boulevard. The City study found no adverse effects on the local street system from the freeway (see Appendix 3-1 in the Final Environmental Impact Statement). The storage facility is located on Gila River Indian Community land and would not be displaced. Reasonable access to the facility would remain available from 32nd Street, Chandler Boulevard, and other east-west local streets. A grade-separated bridge would be constructed for the freeway to go over 32nd Street.
164	Construction	<p>Information related to haul routes, number of trucks, traffic routing, and detouring is discussed in general terms because more detailed information is not available. These details depend highly on the construction sequencing and construction methods, which have not been determined at this stage in the process. As noted on page 6-23 of the Draft Environmental Impact Statement, during construction, the Arizona Department of Transportation typically holds information meetings at the beginning of construction activities regarding the upcoming improvements and work schedules. The public can be informed through construction updates/newsletters or many other means.</p> <p>The Arizona Department of Transportation is evaluating construction delivery methods for the proposed freeway. One concept is to deliver it as a single design-build project. This method would accelerate the construction duration for the entire project to around 3 to 3.5 years. Another concept would be to deliver the project in a more traditional method, breaking the 22-mile corridor into nine segments (each 1 to 3 miles long) and constructing them in phases. Each segment would be under construction for 1 to 3 years, and the total construction duration for the entire corridor would be 5 to 6 years. A discussion of construction implementation is provided beginning on page 3-59 of the Final Environmental Impact Statement. Any particular area of the Preferred Alternative would not be expected to see construction activities beyond an approximate 2-year period.</p>
165	Implementation	<p>The Arizona Department of Transportation is evaluating construction delivery methods for the proposed freeway. One concept is to deliver it as a single design-build project. This method would accelerate the construction duration for the entire project to around 3 to 3.5 years. Another concept would be to deliver the project in a more traditional method, breaking the 22-mile corridor into nine segments (each 1 to 3 miles long) and constructing them in phases. Each segment would be under construction for 1 to 3 years, and the total construction duration for the entire corridor would be 5 to 6 years. A discussion of construction implementation is provided beginning on page 3-59 of the Final Environmental Impact Statement. Any particular area of the Preferred Alternative would not be expected to see construction activities beyond an approximate 2-year period.</p> <p>As noted in the Draft Environmental Impact Statement on page 3-59, “Construction sequencing and duration could change based on several factors, including funding availability, traffic volumes, coordination with other major freeway projects, earthwork balancing, utility relocation schedules, and regional priorities.”</p>

Code	Comment Document
166	<div><ul style="list-style-type: none">• In Fiscal Year (FY) 2011-2015 : Segment between I-10 (Papago) and Baseline Road also Segment between 51st Avenue and 19th Avenue• In FY 2016-2020 : Segment between I-10 (Maricopa) and 19th Avenue• In FY 2021-2025 : Segment between Baseline Road and 51st Avenue<p>The phasing sequence in the DEIS, presented without an explanation of the rationale for the change from the RTP, is:</p><ul style="list-style-type: none">• I-10 (Papago) to Baseline Road and concurrently, I-10 (Maricopa) to approximately 51st Avenue (along Pecos Road and through the South Mountains)• Baseline Road to 51st Avenue<p>Despite repeated assertions throughout the DEIS that the Proposed Action is consistent with the RTP, this divergence in phasing between the RTP and the proposed action is not mentioned in the DEIS.</p><p>i) The evaluation of alternatives is deficient because the presentation of the results of the “select link” analysis is misleading. On Page 3-36 of the DEIS , Figure 3-18 presents the contribution of traffic to the select link by geographical areas, some of which are very large. The select link is at a point between the 51st Avenue and 17th Avenue interchanges on the South Mountain Freeway. The text accompanying Figure 3-18 states that:</p><hr/><p><i>“A projected 73 percent of the travelers who might use the proposed action would have origins and/or destinations near the proposed action.”</i></p><hr/><p>This statement is misleading, since it implies that 73% of the traffic using the South Mountain Freeway would have origins in close proximity to the proposed freeway.</p><p>A review of a larger scale map in the Traffic Overview Report, which is the source of the information presented in Figure 3-18, indicates that only about 15% of the selected link traffic would have origins or destinations within the Study Area as defined in Figure S-2 of the DEIS. If the definition of “proximity” were to be extended to the area within a 20-mile radius of the select link, the contribution of this entire 20-mile radius area would be about 40 to 50%. To reach the 73% level of contribution, a radius of about 30 miles would be needed.</p><p>j) The evaluation of alternatives is deficient because the cut line analysis presented in the Purpose and Need and in the Evaluation Chapters of the DEIS as well as in the Traffic Overview Report is faulty. The following points support this assertion.</p></div>
168	<div><p>Review and Critique of DEIS for Loop 202 (SMF) Page 18</p></div>

Code	Issue	Response
166	Implementation	<p>The Arizona Department of Transportation is evaluating construction delivery methods for the proposed freeway. One concept is to deliver it as a single design-build project. This method would accelerate the construction duration for the entire project to around 3 to 3.5 years. Another concept would be to deliver the project in a more traditional method, breaking the 22-mile corridor into nine segments (each 1 to 3 miles long) and constructing them in phases. Each segment would be under construction for 1 to 3 years, and the total construction duration for the entire corridor would be 5 to 6 years. A discussion of construction implementation is provided beginning on page 3-59 of the Final Environmental Impact Statement. Any particular area of the Preferred Alternative would not be expected to see construction activities beyond an approximate 2-year period.</p> <p>As noted in the Draft Environmental Impact Statement on page 3-59, “Construction sequencing and duration could change based on several factors, including funding availability, traffic volumes, coordination with other major freeway projects, earthwork balancing, utility relocation schedules, and regional priorities.”</p>
167	Traffic	<p>The quote noted in the comment was changed in the Final Environmental Impact Statement to be consistent with a similar statement made in the caption to Figure 3-18: “Seventy-three percent of travelers anticipated to use the proposed action would be involved in trips beginning or ending in the Study Area itself or in the areas immediately surrounding it.” The figure does accurately portray the locations of the cities included in the different areas. The observations in the comment further support that the proposed action would serve regional travel from the southwestern to southeastern portions of the region (not just internal Study Area travel). It should also be noted that by definition, these freeway users would not include traffic from Laveen Village to Interstate 10 (Papago Freeway) or from Ahwatukee Foothills Village to Interstate 10 (Maricopa Freeway). So, the 15 percent of trips identified in the comment as Study Area-originated are by motorists making trips to the other side of the South Mountains.</p>
168		<p>See responses to specific comments below.</p>

Code	Comment Document
169	<p>Only two of the six cut lines analyzed, (north-south cut lines 1 and 4, in Figure 3-13 in the DEIS) are in the Study Area. The limits of cut lines 2, 3, 5, 6 extend well beyond the boundaries of the Study Area, in each case with a small portion of the cut line in the Study Area. Therefore, the cut lines as designated do not convey a sense of deficiencies and traffic volume increases within the Study Area.</p>
170	<p>It is customary in presenting the results of a cut line analysis to itemize each of the facilities included in each cut line along with the capacity for each facility (existing or as proposed in the RTP as appropriate) and the traffic volume for each facility (existing, No Action, and Proposed Action as appropriate). Such information is not presented in the DEIS or in the Traffic Overview Report. Only aggregate quantities for Freeways and Arterials are presented in the various tables that address cut lines.</p>
171	<p>To make the cut lines relevant to the analysis of the South Mountain Freeway, cut lines other than 1 and 4 should have been revised as described below:</p>
172	<ul style="list-style-type: none">• Cut line 2 addresses north south traffic volumes and capacity. Near its western terminus, it should not include a crossing of SR 30, since this facility, when built would carry east-west traffic. <p>Cut line 2 should have been subdivided into two segments, the first segment extending from the western limit (not including SR 30) of the cut line to 43rd Avenue, and the second from 43rd Avenue to a point just West (or South) of I-10 (Maricopa). I-10 should not be included in this cut line, since a segment of I-10 one interchange removed is included in cut line 6. Including the same facility in more than one cut line, especially at points so closely spaced, is an exaggeration of the effect of I-10 and represents double counting.</p>
173	<ul style="list-style-type: none">• Cutline 3 should also have been subdivided into two segments, the first segment extending from the western limit of the cut line to 43rd Avenue, and the second from 43rd Avenue to I-10 (Maricopa).• Cut lines 5 and 6 should have been subdivided into two segments, a southern segment south of South Mountain Park Preserve (SMPP) and a northern segment north of SMPP.
170	<p>Facility-by-facility information, as described in the previous paragraph (paragraph “j”), should have been presented for the re-delineated cut lines.</p>
174	<p>k) The evaluation of alternatives is deficient because a potential freeway weaving problem is not identified and addressed. The distance between</p>
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Code	Issue	Response
169	Purpose and Need	The purpose and need criteria for the proposed action address regional problems, not just problems localized in the Study Area. For this reason, it is appropriate to include cut lines within and in proximity to the Study Area to better understand the distribution of trips in the region.
170	Traffic	The itemized list of traffic volumes by facility has been added to the Traffic Overview Report as an appendix.
171	Traffic	As indicated in the responses below, the identified cut lines were selected to present specific travel patterns and are appropriate for the analysis of the proposed action.
172	Traffic	Cut line 2 is included to evaluate demand across the Salt River. The proposed changes, eliminating the proposed State Route 30 crossing and the Interstate 10 crossing, would discount two major crossings of the Salt River.
173	Traffic	The cut lines as presented represent industry standard practice and were developed in conjunction with leaders of traffic analysis practice in Arizona. The proposed changes would not provide any benefits to the analysis or results. Subdividing the cut lines would eliminate their usefulness in evaluating regional traffic, which is their purpose.
174	Traffic	The project development process includes detailed analyses of the freeway operational characteristics, including weaving areas along the entire freeway. Basic level of service information is presented in Figure 3-39 on page 3-63 of the Draft Environmental Impact Statement. In the figure, the noted section is shown to experience less than 2 hours of level of service E or F conditions during the morning and evening commuting periods.

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	<p>the System Interchange at I-10 (Maricopa) and the signalized intersection at Pecos Road and 40th Street is approximately 3,500 ft. (measured between the signal and the merge point where the Loop 202 mainline and the ramps to and from I-10 come together). When the 40th Street Interchange is constructed, the distance between the ramp merge points will be approximately 2,500 ft. and possibly less. A distance of 2,500 ft between ramp merge and diverge points has the potential of creating a weaving problem on the freeway.</p>
175	<p>This potential problem should have been analyzed and appropriate mitigation proposed, if necessary, and should not have been deferred to the design phase, since the peak hourly traffic volumes are available from MAG, although not reported in the DEIS. Please note that Figure 3-39 in the DEIS indicates congestion at this location, even without a weaving analysis and without specifically considering the effect of bus traffic to/from the 40th Street park-and-ride facility and the effect of potentially high truck traffic volumes on freeway operations.</p>
176	<p>Similar weaving problems may be encountered elsewhere along the freeway.</p>
177	<p>1) The evaluation of alternatives is deficient because no substantive analysis of truck traffic is presented. As a sidebar on Page 3-64, the DEIS presents a good description of the nature of the trucking industry, goods movement in general, and the location of employment areas with heavy truck traffic, along with an illustration of the designated CanaMex route. Also in the sidebar, some general statistics about typical percentages (of trucks as a percent of total traffic) are provided. It is stated that the truck percentage on I-10 “near” the Proposed Action is 8%. Other than the information in the sidebar not much other truck-related statistics are provided. The sidebar also states that providing a truck by-pass is not a Purpose and Need for the SMF. This statement is contradicted by the statement on Page 3-24 of the DEIS, that presents as one of the criteria in the 5th tier screening for selecting a route for the freeway:</p> <div><p>➤ reduction of truck and commuter traffic on 51st Avenue and Beltline Highway</p></div> <p>Thus the SMF, if constructed would act, at least, as a by-pass for trucks that now use 51st Avenue.</p> <p>Figure 4.10 in the “MAG Internal Truck Travel Survey and Truck Model Development Study” is attached as Exhibit 10. The figure indicates that more than 1,000 heavy trucks a day use the route via Riggs Road and Beltline Road to access 51st Avenue.</p> <p>Review and Critique of DEIS for Loop 202 (SMF) Page 20</p>
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Code	Issue	Response
175	Traffic	To mitigate this issue, the on-ramp from Interstate 10 would be extended beyond the 40th Street exit ramp to allow traffic to merge onto the State Route 202L main line.
176	Traffic	The preliminary design of the action alternatives is at a sufficient detail to ensure constructibility and operational feasibility. The analyses to support the environmental impact statement process included weaving considerations in the operational performance of the action alternatives.
177	Traffic	The comment incorrectly attributes the quoted text to the purpose and need for the proposed action when it is identified as being criteria that the Gila River Indian Community Governor requested to be addressed by an alignment on Gila River Indian Community land. The “reduction of truck and commuter traffic on 51st Avenue and the Beltline Highway” is consistent with a project goal as disclosed in the Draft Environmental Impact Statement of promoting better distribution of traffic onto the overall transportation network; better distribution does not equate to a “bypass”.
178	Traffic	It is reasonable to conclude trucks using 51st Avenue are doing so currently to bypass downtown Phoenix. In other words, the bypass of Interstate 10 through downtown Phoenix is already occurring on streets not intended for such use. The proposed freeway would not introduce another bypass route but would better distribute regional and local traffic on the regional network.

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179	<p>The ADOT traffic counts indicate that about 2,000 to 2,500 heavy trucks use SR 85 daily between I-8 and I-10. If the SMF is constructed, some through truck traffic would likely prefer to use the SMF for personal reasons and/or because the SMF route would be slightly shorter in miles than the route via I-8 and SR 85. Also the SMF route would avoid the congestion along I-10 through the urban core of the Phoenix Metropolitan Area.</p>
180	<p>The ADOT traffic counts indicate that about 2,400 heavy trucks are on I-10 (Maricopa) just south of SR 202 (Loop 202 Santan) and also north of SR 202. These trucks presumably have origins and destinations within the Phoenix Metropolitan Area. Depending on the location of the origins and destinations within the Metro Area, some of these heavy trucks would use the SMF to avoid traveling on the congested portions of I-10 in the urban core.</p> <p>The Final Report of the “MAG External Truck Travel Model Development” presents in Table 4-8 estimates of external-to-external (E-E) truck trips. These would be truck trips that travel through the area with no need to stop. No categorization of the size of trucks is provided. All trucks, except for small delivery vehicles, pickups, and vans, are included in the numbers. The table indicates that daily truck traffic on I-10 (between a point south of the junction of I-8 and a point west of SR 85) is approximately 6,200 in both directions combined. Since these are long trips, the majority of these trucks would be heavy trucks. Since there are about 2,000 to 2,500 heavy trucks on SR 85, it appears that 3,500 to 4,000 heavy trucks use I-10 to go through the Metropolitan Area or have an origin or destination within the Metro Area. Table 6-4 in the same report indicates that E-E trips between a point south of the junction of I-8 and a point west of SR 85 would grow at an annual rate of 3.7%. Undoubtedly some of this E-E heavy truck traffic would also use the SMF.</p> <p>In addition the “MAG and PAG External Travel Study” and other MAG reports present information about truck movements, truck origins and destinations, both internally and outside the Metropolitan Area. Despite the availability of a substantial amount of data and a state-of-the-art modeling tool (TransCad) the DEIS does not address the impacts of heavy trucks using the SMF.</p> <p>Also not addressed in the DEIS is the potential of the SMF to become an unintended by pass route, for all vehicles including heavy trucks, via Loop 202 (Santan) and Loop 202 (SMF) between US 60 and I-10 (Papago).</p> <p>In summary, the SMF would become an attractive route for heavy trucks for travel to/from the Phoenix Metropolitan Area as well as for heavy</p>
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179	Trucks	It is expected that “true” through-truck traffic (not having to stop in the metropolitan area) would continue to use the faster, designated, and posted bypass system of Interstate 8 and State Route 85. That the proposed freeway would avoid congestion along Interstate 10 would not seem material to trucks currently using the Interstate 8/State Route 85 bypass.
180	Purpose and Need	The proposed freeway is part of a transportation system developed to improve mobility in the region by increasing capacity and allowing traffic—including truck traffic—to access a segment of the “loop” system (see pages 1-21, 1-22, 3-1, and 3-3 of the Final Environmental Impact Statement) in the Phoenix metropolitan area. The proposed South Mountain Freeway would be a commuter corridor, helping to move local traffic. As with all other freeways in the region, trucks would use it for the through-transport of freight, for transport to and from distribution centers, and for transport to support local commerce. Nevertheless, the primary vehicles using the proposed freeway would be automobiles. The Maricopa Association of Governments regional travel demand model projects that truck traffic would represent approximately 10 percent of the total traffic on the proposed freeway, similar to what is currently experienced on other regional freeways such as Interstate 10, State Route 101L, and U.S. Route 60. As disclosed in the Final Environmental Impact Statement, it is expected that “true” through-truck traffic (not having to stop in the metropolitan area) would continue to use the faster, designated, and posted bypass system of Interstate 8 and State Route 85 (see page 3-64 of the Final Environmental Impact Statement).
181	Trucks	Among the factors considered in this study were 1) the amount of truck traffic that would be generated if an action alternative were to become the Selected Alternative and 2) that traffic’s potential impact on the surrounding community. The Maricopa Association of Governments regional travel demand model forecasts approximately 10 percent truck traffic on the South Mountain Freeway in 2035 (see Final Environmental Impact Statement page 3-64). This percentage is similar to current conditions on Interstate 10 between Loop 101 and Interstate 17 and on U.S. Route 60. Air quality and noise modeling for the Draft and Final Environmental Impact Statements used this forecast truck traffic (see Final Environmental Impact Statement pages 4-68 and 4-100, respectively).
182	Traffic	Location #2 in Figure 3-12, on page 3-29 of the Draft Environmental Impact Statement, indicates that traffic along State Route 202L (Santan Freeway) just east of Interstate 10 would experience substantially higher traffic volumes with the proposed freeway when compared with conditions without the proposed freeway. This is an intended outcome for the region’s freeway system. The project team does not anticipate that “all vehicles” would use State Route 202L; a large volume of traffic would continue to use U.S. Route 60 and Interstate 10 (see Figure 3-12).
183	Trucks	Among the factors considered in this study were 1) the amount of truck traffic that would be generated if an action alternative were to become the Selected Alternative and 2) that traffic’s potential impact on the surrounding community.

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	<p>trucks traveling through the Metro Area. The DEIS is deficient in not addressing truck traffic impacts and formulating and evaluating appropriate alternatives to deal with truck traffic, even though ADOT states in the DEIS that heavy trucks will use the SMF and even though a wealth of information is available about freight movements. The DEIS fails to take advantage of this wealth of information to provide an estimate of the number of trucks that can be expected on the SMF. Indications are that heavy trucks will use the SMF to a much greater extent than other freeways in the Metropolitan Area, with the possible exception of I-10. Also, as pointed out earlier, the Purpose and Need is faulty and has led to the elimination of several alternatives that might have been carried forward for further study if the truck traffic issue had been recognized at the outset.</p>
184	<p>m) Sufficient information is not presented in the DEIS. Numerous tables and figures carry the notation “Source: MAG, Year, Extrapolated Analysis.” The actual source of the data should have been provided and the data provided by MAG should have been included in the Appendix. The Traffic Overview Report, which is the basis of much of Chapter 3 (Alternatives) in the DEIS, does not offer anything further in this matter. Without more backup information, it is not possible to ascertain what constitutes “extrapolation,” and whether the extrapolation reflects the full extent and significance of the information available.</p>
185	<p>In Chapter 3 (Alternatives) of the DEIS, traffic volume, capacity, and other information is provided in spotty manner and does not offer the opportunity to ascertain if the information provided for selected locations is reasonable and if it fits in with the overall picture. For example, in Figure 3-38, daily traffic volumes are presented for the length of South Mountain Freeway between I-10 (Maricopa) and I-10 (Papago). However, traffic volumes are not presented for Loop 202 (Santan) and I-10 north, south, east, or west, of the junction (s) of I-10. Therefore routing changes attributable to the Proposed Action cannot be identified.</p>
186	<p>n) The selection of the preliminarily selected alternative for the Western Section should have been based on a side-by-side comparative evaluation of the three action alternatives plus the No Action Alternative. In the DEIS, the No Action Alternative is not included in the evaluation that leads to the selection of the preliminarily preferred alternative. In Figure 3-41, Page 3-67 of the DEIS, a comparison of the three action alternatives is presented. On the basis of this evaluation, the W71 Alternative is eliminated, even though it is unclear why it is substantially, if at all, inferior to the W59 Alternative and the W101 Alternative Options. The comparative information presented is:</p>
	<p>Review and Critique of DEIS for Loop 202 (SMF) Page 22</p>

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183 (cont.)		<p>The Maricopa Association of Governments regional travel demand model forecasts approximately 10 percent truck traffic on the South Mountain Freeway in 2035 (see Final Environmental Impact Statement page 3-64). This percentage is similar to current conditions on Interstate 10 between Loop 101 and Interstate 17 and on U.S. Route 60. Air quality and noise modeling for the Draft and Final Environmental Impact Statements used this forecast truck traffic (see Final Environmental Impact Statement pages 4-68 and 4-100, respectively).</p> <p>Commercial trucks would use the proposed action. As with all other freeways in the Maricopa Association of Governments region, trucks would use it for the through-transport of freight, for transport to and from distribution centers, and for transport to support local commerce. And as with travel on all other freeways in the Maricopa Association of Governments region, the primary users of the proposed action would be automobiles.</p> <p>The proposed freeway is part of a transportation system developed to improve mobility in the region by increasing capacity and allowing traffic—including truck traffic—to access a segment of the “loop” system (see pages 1-21, 1-22, 3-1, and 3-3 of the Final Environmental Impact Statement) in the Phoenix metropolitan area. The proposed South Mountain Freeway would be a commuter corridor, helping to move local traffic. As with all other freeways in the region, trucks would use it for the through-transport of freight, for transport to and from distribution centers, and for transport to support local commerce. Nevertheless, the primary vehicles using the proposed freeway would be automobiles. The Maricopa Association of Governments regional travel demand model projects that truck traffic would represent approximately 10 percent of the total traffic on the proposed freeway, similar to what is currently experienced on other regional freeways such as Interstate 10, State Route 101L, and U.S. Route 60. As disclosed in the Final Environmental Impact Statement, it is expected that “true” through-truck traffic (not having to stop in the metropolitan area) would continue to use the faster, designated, and posted bypass system of Interstate 8 and State Route 85 (see page 3-64 of the Final Environmental Impact Statement).</p>
184	Traffic	<p>The sidebar, “How are MAG data used in the DEIS?,” on page 1-4 of the Draft Environmental Impact Statement explains the citation notations. In general, the source of the traffic data is the Maricopa Association of Governments regional travel demand model, and analyses were performed using Maricopa Association of Governments data as inputs.</p>
185	Traffic	<p>The desired information is available in Figure 3-12, on page 3-29 of the Draft Environmental Impact Statement. This figure presents traffic volumes with and without the proposed freeway at locations similar to those noted in the comment.</p>
186	Alternatives	<p>The section, <i>Identification of a Preferred Alternative</i>, beginning on page 3-65 of the Draft Environmental Impact Statement, provides the logical process that was used by decision makers to identify the Preferred Alternatives. A summary of key elements of each action alternative is provided in Figure 3-41.</p>

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187	<ul style="list-style-type: none">• The W71 Alternative would require no Bureau of Land Management (BLM) land reclassification, whereas the W59 Alternative would.• The W71 Alternative would displace 22 businesses, compared to 41 for the W59 Alternative and 14 to 30 for the W101 Alternative Options.• The W71 Alternative would result in an annual tax revenue loss of \$6.3 million in the City of Phoenix, but no revenue loss in Tolleson and Avondale. By comparison, the W59 Alternative would have a tax revenue loss of \$5.1 million in Phoenix and none in Tolleson and Avondale. The W101 Alternative Options would have a tax revenue loss of \$7.0 million to \$8.0 million for all three cities combined.• The W71 Alternative would have a total project cost (right-of-way plus construction cost) of \$1.54 billion, compared to \$1.23 billion for the W59 Alternative and \$1.72 to \$1.87 billion for the W101 Alternative Options.• The W71 Alternative would displace 825 residential properties, compared to 733 for the W59 Alternative and 926 to 1304 (single family) for the W101 Alternative Options.• The W71 Alternative would affect 4 high priority hazardous sites, compared to 5 for the W59 Alternative and 1 for the W101 Alternative Options.• During the period December 2003 to April 2006, six Cities and Towns passed resolutions in support of the W59 Alternative and opposing the W101 Alternative, with the City of Tolleson passing two separate resolutions. Since the DEIS gives no indication to the contrary, it is assumed that none of these seven to nine year old resolutions opposed the W71 Alternative. <p>In summary, based on the information presented in Figure 3-41, the W71 Alternative would rank, at worst, in the middle of the three alternatives evaluated, and it should not have been eliminated from further consideration. This improper elimination of the W71 Alternative led to a final stage evaluation of the W101 and W59 Alternatives, once again without the inclusion of the No Action Alternative in this final stage of evaluation and with an entirely different set of evaluation criteria.</p> <p>The comparative evaluation of the W101 and W59 Alternatives is described on Pages 3-68 and 3-69 of the DEIS. Notwithstanding the fact that the No Action Alternative was not included in this final evaluation stage and not withstanding the fact that an entirely new set of evaluation criteria was introduced, there are some flaws in the comparison of the two Alternatives as discussed below. While the discussion is focused on travel modeling, traffic, circulation, and transportation and traffic engineering/planning, readily apparent flaws in other subjects are also pointed out. This should not be construed as a complete review of matters pertaining to other subjects.</p> <p>Review and Critique of DEIS for Loop 202 (SMF) Page 23</p>
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186 (cont.)		As stated on page 3-40 of the Final Environmental Impact Statement, the No-Action Alternative would not satisfy the purpose and need of the proposed action because it would result in further difficulty in gaining access to adjacent land uses, increased difficulty in gaining access to Interstate and regional freeway systems from the local arterial street network, increased levels of congestion-related impacts, continued degradation in performance of regional freeway-dependent transit services, increased trip times, and higher user costs. Further, the No-Action Alternative would be inconsistent with Maricopa Association of Governments’ and local jurisdictions’ long-range planning and policies. The No-Action Alternative was included in the Draft and Final Environmental Impact Statements for detailed study to compare impacts of the action alternatives with the consequences of doing nothing (impacts can result from choosing to do nothing).
187	Alternatives	The information on page 3-41 of the Draft Environmental Impact Statement provides the elements that were used by decision makers to determine that the W71 Alternative would not be the Preferred Alternative. The Arizona Department of Transportation, in coordination with the Federal Highway Administration, determined that the W59 and W101 Alternatives would provide more benefits than would the W71 Alternative. The W71 Alternative was not “eliminated” because it is still a viable action alternative; it was just not the Preferred Alternative.
188	Alternatives	The information on page 3-41 of the Draft Environmental Impact Statement provides the elements that were used by decision makers to determine that the W71 Alternative would not be the Preferred Alternative. The Arizona Department of Transportation, in coordination with the Federal Highway Administration, determined that the W59 and W101 Alternatives would provide more benefits than would the W71 Alternative. The W71 Alternative was not “eliminated” because it is still a viable action alternative; it was just not the Preferred Alternative. The No-Action Alternative is included for detailed study in accordance with National Environmental Policy Act requirements to compare beneficial and adverse impacts of the action alternatives with those benefits and consequences (adverse impacts) of not proceeding with one of the action alternatives.

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	<p><u>Under the heading “Overall Transportation Needs” on Page 3-68:</u></p>
189	<ul style="list-style-type: none">• In reference to the first bullet item – Linking the southern areas of the region with the central metropolitan area was not identified as a goal in the Purpose and Need, so this should not be a basis for evaluation. Both Alternatives would provide an alternative route to I-10 for regional connectivity, as asserted elsewhere in the DEIS, so this cannot be used as a distinguishing factor. Also, based on this bullet item, the proposed action will merely change how traffic accesses I-10, not keep traffic out of the central metropolitan area. Ultimately, traffic will use the congested facilities in the central metropolitan area.
190	<ul style="list-style-type: none">• In reference to the third bullet item – The statement is true and would be a point favoring the W101 Alternative.
191	<ul style="list-style-type: none">• In reference to the fourth and fifth bullet items – These bullet items state that for the W101 Alternative widening improvements would be needed on Loop 101 and that for the W59 Alternative widening improvements would be needed on I-10. What the comparison fails to mention is that in addition to the widening of I-10, the W59 Alternative will necessitate the construction of a new freeway-to-freeway interchange, modifications of the existing interchanges at 51st Avenue, 59th Avenue, and 67th Avenue, as well as the construction of service roads between 51st and 67th Avenues. Likewise, in addition to widening improvements on Loop 101, a partial or full reconstruction of the interchange at I-10/Loop 101, relocation of ramps at McDowell Road and Thomas Road as well as modification of existing interchanges at 99th Avenue and 91st Avenue would be necessary. There is no indication as to the relative ease or difficulty of constructing the widening improvements and associated interchange modifications on I-10 and Loop 101. It is unclear how these two bullet items are used to select one alternative over the other.
	<p><u>Under the Heading “Consistency with Regional and Long-range Planning Goals” on Page 3-69:</u></p>
192	<p>In reference to the first bullet item – If less land is converted to freeway use, obviously more land would potentially be available for development. The rationale for the statement: “.....thereby optimizing opportunities for planned development” is unclear and should have been explained.</p>
193	<p><u>Under the Heading “Environmental and Societal Impacts” on Page 3-69:</u></p>
194	<p>In reference to the first bullet item – Per Figure 3-41, Page 3-67 of the DEIS, the W101 Alternative Options would displace 926 to 1,304 single-</p>
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189	Alternatives	The comparative analysis was not confined to evaluating purpose and need criteria for the proposed action. It had already been determined that the W59 and W101 Alternatives met those purpose and need criteria. Otherwise, they would not have advanced to this stage of the alternatives development and screening process. The primary observation is that the W59 Alternative would provide a more direct route to the central metropolitan area as compared with the W101 Alternative. This is an accurate observation and a point favoring the W59 Alternative.
190		Comment noted.
191	Alternatives	The bullets are provided to offset the impacts of each. Neither provides a substantial improvement over the other with respect to improvements associated with the connections at Interstate 10 (Papago Freeway).
192	Alternatives	Further explanation has been provided on page 3-69 of the Final Environmental Impact Statement.
193		Comment noted.
194	Alternatives	The breakdown by type of displacement is presented in the section, <i>Displacements and Relocations</i> , on page 4-39 in the Draft Environmental Impact Statement. See Table 4-12. The 733 residential displacements for the W59 Alternative include 680 multifamily units.

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	family residential properties, and the W59 Alternative would displace 733 residential properties. For the W59 Alternative, the mix of multi-family and single-family residential properties is not stated, making it impossible to compare the number of housing units that would be displaced. Following is a direct quote from the “Title VI and Environmental Justice Report”, Page 4-3.
194	<i>In addition to the single-family displacements, the W59 Alternative would result in the potential displacement of two apartment complexes having a total of 680 units. These apartments fall within a census block where greater than 50 percent of the population is minority. The majority of the apartment units are “market-rate” rents; however, one of the apartment complexes currently accepts Section 8 housing vouchers. (Of the 264 units in the complex, 16 currently use Section 8 vouchers.</i>
195	Taking into consideration the 680 multi-family units, the W59 Alternative would result in the displacement 1411 housing units, which would be more than any of the W101 Alternative options. <u>Under the heading “Operational Differences” on Page 3-69:</u>
196	In reference to the first bullet item – Based on the information in Figure 3-40 on Page 3-66 of the DEIS, the statement in this bullet item is true. The DEIS fails to point out that Figure 3-40 also indicates, however, that operating conditions would be virtually identical for the two alternatives east of 59 th Avenue, closer to the central metropolitan area.
197	In reference to the second bullet item - The statement is true and would be a point favoring the W101 Alternative.
198	In reference to the third bullet item – It is unclear what travel movements and how many motorists would benefit from this “direct access to downtown Phoenix.” Regardless of which and how many motorists would benefit from this “direct access,” travel would continue to be under congested conditions on I-10 east of 59 th Avenue.
199	In reference to the fourth bullet item - The statement is true and would be a point favoring the W101 Alternative, although the number of motorists that would benefit from this “better access” is not presented.
200	In reference to the fifth bullet item – Since the location of SR 30 (called SR 801 in the RTP) and the timetable for its construction are unknown, this bullet item is speculative.
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Code	Issue	Response
195	Acquisitions and Relocations	The 680 multifamily units have already been counted in the total for the W59 Alternative. See Table 4-12, on page 4-39.
196	Traffic	Agree.
197	Alternative	Comment noted. The identification by the Arizona Department of Transportation, with concurrence from the Federal Highway Administration, of the W59/ E1 Alternative as the Preferred Alternative (which includes the W59 Alternative in the Western Section of the Study Area) sought to balance agency responsibilities to address regional mobility needs while being fiscally responsible and sensitive to local communities and environmental conditions.
198		Comment noted.
199		Comment noted.
200	Alternatives	Projects in the <i>Regional Transportation Plan</i> historically have been funded and constructed. Therefore, the project is reasonably foreseeable.

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200	<p>In reference to the sixth bullet item – Since the location of SR 30 (called SR 801 in the RTP) and the timetable for its construction are unknown, this bullet item is, in part, speculative.</p> <p><u>Under the heading “Estimated Costs” on Page 3-69:</u></p>
201	<p>Planning level cost estimates presented in Figure 3-36 and accompanying text on Page 3-59 of the DEIS do not indicate that an allowance for contingencies was included in the cost estimates. A contingency allowance of about 30 to 40 percent of the construction cost (excluding right-of-way) is typically included in the cost estimate at this level of project development. It is also noted in the DEIS that right-of-way costs will depend on growth in the region, and the actual right-of-way costs may differ from the estimates. Because of these unknowns, the actual difference in cost between the two alternatives may be lower or higher than the \$490 million to \$640 million range cited in this bullet item.</p>
202	<p>In summary, the comparative evaluation in the DEIS does not support the selection of the W59 Alternative as the Preliminary Preferred Alternative because:</p> <ul style="list-style-type: none">• The No Action Alternative was not included in the final comparative evaluation.• The W71 Alternative was unjustifiable eliminated.• Uniform comparative evaluation criteria were not used.• There were data and rationale flaws in the comparative evaluation process.• Viable alternatives to the proposed eastern portion of the project, discussed previously, would affect the selection of alternatives for the western alignment. The DEIS should have had a discussion of this matter in the comparative evaluation of the western alignments.
203	<p>9. None of the Action Alternatives will alleviate the anticipated capacity deficiencies identified in the Purpose and Need. Despite the expenditure of about \$2 billion to \$3 billion to build the South Mountain Freeway and despite the displacement of many residences and business establishments, there will be capacity deficiencies at levels comparable to the No Action Alternative on freeways and arterials throughout the Metropolitan Area and on the South Mountain Freeway itself. While the levels of congestion may be slightly less, Level of Service E and F conditions will prevail at approximately the same levels and durations in 2035 with or without an Action Alternative. In all graphics that present congestion levels throughout the DEIS, no distinction is made between Level of Service (LOS) E and LOS F. Therefore it is impossible to ascertain if an improvement from LOS F to LOS E is achieved or a degradation from LOS E to LOS F.</p>
204	<p>Most, if not all, jurisdictions differentiate between LOS E and LOS F in their analyses. The reason is that, as stated on Page 1-14 of the DEIS, LOS E</p> <p>Review and Critique of DEIS for Loop 202 (SMF) Page 26</p>

Code	Issue	Response
201	Alternatives	<p>The cost estimates for all of the action alternatives include contingencies for construction and right-of-way. The same assumptions were made for each alternative. The estimates are identified as planning-level cost estimates and consideration of such estimates is appropriated in the environmental impact statement process.</p>
202	Alternatives	<p>The Draft Environmental Impact Statement presents the information that was used by the Arizona Department of Transportation, with concurrence from the Federal Highway Administration, to identify the W59 and E1 Alternatives as the Preferred Alternatives.</p> <p>The No-Action Alternative is included for detailed study in accordance with National Environmental Policy Act requirements to compare beneficial and adverse impacts of the action alternatives with those benefits and consequences (adverse impacts) of not proceeding with one of the action alternatives. (Impacts can occur through choosing to do nothing.) The No-Action Alternative would not satisfy the purpose and need of the proposed action (see Draft Environmental Impact Statement page 3-40) and was, therefore, not identified as the Preferred Alternative.</p> <p>The W71 Alternative was not eliminated; it was determined to be the least desirable of the three action alternatives in the Western Section (reasons are noted previously).</p> <p>There is no restriction on what ultimately become the determining factors among alternatives. The Draft Environmental Impact Statement presents those factors that were actually used by the Arizona Department of Transportation and Federal Highway Administration to identify the Preferred Alternative.</p> <p>The alternatives development and screening process was sound, and the information used was disclosed in the Draft Environmental Impact Statement.</p> <p>None of the other Eastern Section alternatives identified in the Draft Environmental Impact Statement or new alternatives proposed in the comment would change the alternatives development and screening process; they were all eliminated from detailed study.</p>
203	Traffic	<p>The comparison of traffic operational characteristics between the action alternatives and the No-Action Alternative is presented in the Draft Environmental Impact Statement, beginning on page 3-27 of the Draft Environmental Impact Statement. The analysis shows that the action alternatives would:</p> <ul style="list-style-type: none">• reduce overall traffic on the arterial street system (see Figures 3-12 and 3-13)• optimize travel on the region’s freeway system (see Figure 3-12)• reduce the capacity deficiency to levels better than experienced today (see Figures 1-12 and 3-14)• reduce the duration of level of service E or F conditions in key areas of the region’s freeway system (see Figure 3-15)• improve travel times on trips within the Study Area and across the region (see Figure 3-17 and Table 3-8)• provide improved regional mobility for areas projected to experience growth in the next 25 years (see Figures 1-7 and 3-18) <p>When all of this is considered in the realm of travel time savings for motorists in the region, the user benefits approximate \$200 million per year (see Table 4-26).</p>

Code	Comment Document
204	<p>represents unstable traffic flow with traffic volume approaching capacity or at capacity. LOS F, on the other hand, represents congested and stop-and-go conditions, with traffic volumes over capacity. Yet in the Traffic Overview LOS E is defined as a condition where the volume to capacity ratio (V/C ratio) is greater than 0.86 (Table 10, Page 2-8) (Exhibit 11). In other words, the DEIS asserts that congestion prevails when the traffic volume reaches 86% of capacity, contrary to the statement on Page 1-14 of the DEIS. Most jurisdictions (including the California Department of Transportation, Caltrans) define the upper limit of LOS D to be a V/C ratio of 0.89. V/C ratios in the range of 0.91 to 1.00 represent LOS E, and 1.01 and above represent LOS F.</p>
205	<p>Furthermore, as indicated in Exhibit 11, the DEIS uses a freeway capacity value of 2,030 vehicles per hour per lane (v/ph/pl), whereas the Highway Capacity Manual (a publication by the Transportation Research Board that is widely used by many jurisdictions for capacity calculations, including ADOT) cites a service volume of 2,250 passenger cars per hour per lane (pc/ph/pl) at LOS E. The reason for this difference is not explained.</p>
206	<p>Also no explanation is provided as to how the duration of congestion is determined. The DEIS should have provided a good explanation of how duration of congestion is determined for planning purposes on the basis of the V/C ratio, especially in the analysis in this DEIS, where no distinction is made between LOS E and LOS F.</p>
207	<p>Figure 3-14 on Page 3-31 of the DEIS states that the Proposed Freeway will accommodate 6% of the regional travel demand, but that 5% of the travel demand will remain unmet. The same illustration indicates that arterial system enhancements would accommodate 5% of the regional travel demand. Figure 9-3 in the MAG RTP (Exhibit 12) presents the planned arterial improvements. Only one arterial improvement, an easterly extension of SR 801, is shown within the Study Area even though the Summary and Purpose and Need Chapters stress that there will be large amounts of growth in the southwestern portion of the Metropolitan Area. Additional arterial improvements in the study area along with arterial system enhancements throughout the modeling area may be able to accommodate the remaining unmet travel demand. The addition of the freeway segment included in the hybrid alternative illustrated in Exhibit 8 would also help reduce the unmet travel demand. As a side note, it is not explained in Figure 3-14 why it was necessary to use “data extrapolated from the 41st Street cut line.” MAG’s TransCad model is capable of summarizing travel time, vehicle hours of travel, vehicle miles of travel by any geographic area, by facility type, by Level of service, and other selected filters. The use of “extrapolated data” appears to be unwarranted.</p>
208	<p>Figures 3-15 and 3-16 (Pages 3-32 and 3-33 in the DEIS) present changes in congestion with the No Action compared to the Proposed Action conditions. The differences are very subtle. Without the distinction between segments operating</p>

Code	Issue	Response
204	Traffic	<p>Because much of the region’s freeway system is congested, merely noting the level of service of a segment of freeway would not provide adequate information. Therefore, the project team provided the duration of congested conditions and defined congested conditions as being level of service E or F. The Arizona Department of Transportation typically uses level of service D as a threshold for acceptable conditions, so anything in excess of that was determined to be labeled as congested. The thresholds used in the analysis were determined in coordination with the Maricopa Association of Governments and based on observed traffic conditions in the Phoenix metropolitan area.</p>
205	Traffic	<p>Capacity levels used in the Draft Environmental Impact Statement were based on the thresholds used in the Maricopa Association of Governments regional travel demand model. The Maricopa Association of Governments model is calibrated to reflect conditions on Phoenix metropolitan freeways.</p>
206	Traffic	<p>The thresholds used to calculate duration of level of service E or F are provided in the Traffic Overview Report in Table 10. This level of detail is appropriate for the technical report.</p>
207	Traffic	<p>The <i>Regional Transportation Plan</i> is not the primary source of funding for expansion of the arterial street system. Funding for arterial streets generally comes from the local jurisdiction or through impact fees for development. It is anticipated that the arterial street network within the Study Area will be expanded in this same manner. The Maricopa Association of Governments regional travel demand model includes assumptions related to arterial street expansion based on local jurisdiction general planning. In the case of the Study Area, it is assumed that most of the arterial street network would be built out by 2035. Chapter 1, <i>Purpose and Need</i>, concludes that even with these improvements in place, there is a clear need for a major transportation facility in the Study Area.</p> <p>The analysis of capacity deficiency (unmet demand) in the region is presented in Figures 1-12 and 3-24. The analysis shows that the unmet demand in 2010 is 19 percent; in 2035, without the proposed freeway, the unmet demand increases to 24 percent; in 2035, with the proposed freeway, the unmet demand would be only 18 percent. The cut-line analysis (see Figure 3-13) shows that with the proposed freeway there would be a substantial shift in regional travel from arterial streets to freeways.</p> <p>The 41st Street cut line was used as a way to focus the analysis on the east–west movement that would be influenced by the proposed freeway. The noted information from the Maricopa Association of Governments travel demand model was used in other analyses.</p>
208	Traffic	<p>Because much of the region’s freeway system is congested, merely noting the level of service of a segment of freeway would not provide adequate information. Therefore, the project team provided the duration of congested conditions and defined congested conditions as being level of service E or F. The Arizona Department of Transportation typically uses level of service D as a threshold for acceptable conditions, so anything in excess of that was determined to be labeled as congested. The thresholds used in the analysis were determined in coordination with Maricopa Association of Governments and based on observed traffic conditions in the Phoenix metropolitan area.</p> <p>The thresholds used to calculate the duration of level of service E or F are provided in the Traffic Overview Report in Table 10.</p>

Code	Comment Document
	at LOS E and LOS F and without an explanation of how the duration of congestion is determined, the information presented is not very useful for a thorough evaluation by the public and for decision-making.
209	10. Appropriate mitigation measures are not proposed to mitigate the impacts of the Action Alternatives. Assuming for discussion purposes only, that the Preliminarily Preferred Action Alternative is implemented, appropriate mitigation measures should have been addressed in the DEIS. Some appropriate mitigation measures would include:
210	<ul style="list-style-type: none">• Placement of truck weight limits on the SMF• Upgrading the Route via I-10/I-8/SR 85/I-10 to full freeway standards and obtaining Congressional approval for the designation of this route as the CanaMex Route• Development of an east-west truck route to by-pass the Phoenix Metropolitan Area• Formulation and inclusion in the RTP of a plan for arterials in the Southwest area to help guide development patterns so that desirable options are not precluded• Restricting the transporting of hazardous materials on the SMF• Others
211	11. Based on these traffic and circulation considerations, none of the Action Alternatives should have been selected as the Preferred Alternative for the following reasons.
212	a. It is understood that the Preliminarily Preferred Alternative would add capacity to the Regional Freeway System. On the other hand, the added capacity would have nominal effect on alleviating congestion in the central metropolitan area, where the need is greatest. This raises the question if the proposed SMF is the correct tool to deal with congestion in the central metropolitan area.
213	b. The Preferred Alternative is not consistent with the RTP because the phasing of construction presented in the DEIS differs from the phasing plan in the RTP.
214	c. There are many deficiencies in the DEIS, including:
215	<ul style="list-style-type: none">• use of faulty socio-economic data;• faulty forecasts of vehicular travel resulting from the use of faulty socio-economic data as input to the travel model;
Review and Critique of DEIS for Loop 202 (SMF) Page 28	

Code	Issue	Response
209		See response to specific comments below.
210	Trucks	<p>As it relates to truck weight limits and transport of hazardous materials, Arizona highways, as are most highways across the United States, are open to all kinds of traffic, so long as the cargo being carried is in accordance with U.S. Department of Transportation regulations for the specific type of cargo. The South Mountain Freeway, if implemented, is expected to operate under the same rules as other similar facilities in the state; truck traffic would be expected to be permissible (see text box on page 4-157 of the Final Environmental Impact Statement).</p> <p>Improvements to State Route 85 are included in the <i>Regional Transportation Plan</i>, and the plan is to continue to improve this corridor until it is completely access-controlled with a freeway section north of the Gila River.</p> <p>The <i>Regional Transportation Plan</i> is not the primary source of funding for expansion of the arterial street system. Funding for arterial streets generally comes from the local jurisdiction or through impact fees for development. It is anticipated that the arterial street network within the Study Area will be expanded in this same manner. The Maricopa Association of Governments regional travel demand model includes assumptions related to arterial street expansion based on local jurisdiction general planning. In the case of the Study Area, it is assumed that most of the arterial street network would be built out by 2035.</p> <p>The Arizona Department of Transportation has a few locations in the state with hazardous cargo restrictions, but these restrictions are based on emergency response issues or roadway design limitations specific to that location. For example, the Interstate 10 Deck Park Tunnel has certain hazardous cargo transport restrictions because of the limited ability for emergency responders to address a hazardous materials incident in the tunnel.</p>
211		See responses to specific comments below.
212	Alternatives	The comment infers the transportation problem is congestion in the central metropolitan area. As presented in Chapter 1 of the Draft and Final Environmental Impact Statements, the purpose and need analysis demonstrated a transportation problem associated with east-west regional mobility in the southwestern region of the Phoenix metropolitan area. The Arizona Department of Transportation, with concurrence from the Federal Highway Administration, has determined that the South Mountain Freeway (as made up by the W59 and E1 Alternatives) is the appropriate solution to the described transportation problem. A contribution of the Preferred Alternative to alleviate congestion in the central metropolitan area would be an incidental benefit of the project and would support a goal of better distribution of regional traffic across the network.
213	Implementation	Construction phasing of a project is not an indicator of “consistency.” The location and facility type are indicators of consistency. Nowhere in the Draft Environmental Impact Statement is it referenced that the proposed action is needed to comply with the <i>Regional Transportation Plan</i> .
214		Comment noted.

Code	Comment Document
	<ul style="list-style-type: none">unreliable Air Quality and Noise impact analyses, since they are based on faulty travel forecasts;failure to analyze viable alternatives with appropriate detail;deficiencies in the evaluation process and methodology;failure to analyze crucial potential impacts, such as truck traffic, impacts on arterials connecting to and near proposed interchanges, and others identified in this report. <p>These deficiencies in the DEIS render the DEIS useless as a decision-making tool. The selection of a Preliminarily Preferred Alternative on the basis of a faulty DEIS is inappropriate.</p> <p>Because of these considerations and because it avoids any physical impacts on the environment, the No Action Alternative should have been selected as the Preferred Alternative.</p>
216	
217	
Review and Critique of DEIS for Loop 202 (SMF) Page 29	

Code	Issue	Response
215	Traffic	<p>The analyses in the Draft Environmental Impact Statement used socioeconomic and traffic projections at the regional analysis zone and traffic analysis zone levels. At the time of publication of the Draft Environmental Impact Statement, Census 2010-based socioeconomic data at the regional analysis zone and traffic analysis zone levels had not been adopted by the Maricopa Association of Governments and were not available to the project team. Therefore, the data used in the Draft Environmental Impact Statement were the most appropriate information available. The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future.</p> <p>The new projections were also used to update the air and noise analyses for the Final Environmental Impact Statement (see sections beginning on pages 4-68 and 4-88, respectively).</p> <p>All of the alternatives were subject to a thorough evaluation using a multidisciplinary set of criteria in accordance with National Environmental Policy Act and Federal Highway Administration guidance.</p> <p>Among the factors considered in this study were 1) the amount of truck traffic that would be generated if an action alternative were to become the Selected Alternative and 2) that traffic’s potential impact on the surrounding community. The right-of-way footprints for the action alternatives include the necessary widening of arterial streets connecting to the proposed freeway. Additional traffic-related impacts have been coordinated with the appropriate local jurisdictions.</p>

Code	Comment Document
	<div>EXHIBITS</div>

Code	Issue	Response
216	Alternatives	<p>All analyses presented in the Draft Environmental Impact Statement used state-of-the-practice, scientific community accepted methods, data and assumptions and were updated as appropriate as new data and/or regulatory requirements were disclosed. Updating analyses throughout an environmental impact statement process is common and expected. The Final Environmental Impact Statement reflects those updates.</p> <p>The Arizona Department of Transportation and Federal Highway Administration, in cooperation with the U.S. Army Corps of Engineers, the U.S. Bureau of Indian Affairs, and the Western Area Power Administration, prepared the Draft and Final Environmental Impact Statements and Section 4(f) Evaluation in accordance with the National Environmental Policy Act of 1969 [42 United States Code § 4332(2) (c)], Section 4(f) of the U.S. Department of Transportation Act of 1966 (49 United States Code § 303, as amended), and Section 404 of the Clean Water Act of 1977 (33 United States Code § 1251). All of these agencies are experienced in the review of National Environmental Policy Act documents and have found the logical sequence of decision making to be sound and in line with National Environmental Policy Act requirements. The Draft Environmental Impact Statement and Section 4(f) Evaluation 1) satisfies Federal Highway Administration and Arizona Department of Transportation’s environmental analysis requirements; 2) provides a comparison of the social, economic, and environmental impacts that may result from implementation of the proposed action—construction and operation of a major transportation facility; and 3) identifies measures to avoid, reduce, or otherwise mitigate adverse impacts.</p>
217	Alternatives	<p>The No-Action Alternative would not avoid all physical impacts on the environment. In contrast, the No-Action Alternative would result in:</p> <ul style="list-style-type: none">• further difficulty in gaining access to adjacent land uses• increased difficulty in gaining access to Interstate and regional freeway systems from the local arterial street network• increased levels of congestion-related impacts such as deterioration of air quality• continued degradation in performance of regional freeway-dependent transit services• increased trip times and higher user costs <p>For these reasons, the Arizona Department of Transportation, with concurrence from the Federal Highway Administration, did not select the No-Action Alternative, instead identifying the W59 and E1 Alternatives as the Preferred Alternatives.</p>

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TABLE 20-4
ROADWAY PERFORMANCE MEASURES FROM MAG MODEL
(Maricopa County Portion of MAG Modeling Area)*

Measures	Scenario		
	2008 Base	2030 RTP	2030 No Build
Population**	4,236,285	5,381,4254	6,381,425
Supply Measures			
Lane-Miles			
Freeways	1,920	2,655	1,914
Arterials	10,270	19,596	18,166
Capacity Miles			
Freeways	53,210,043	79,369,209	53,048,469
Arterials	79,486,623	157,610,234	146,796,437
Demand Measures			
Daily Vehicle-Miles (VMT)			
Freeways	33,721,948	58,423,300	43,355,601
Arterials	46,296,429	81,316,235	92,823,216
Level of Service Measures			
Congested Lane-Miles			
Freeways	433	625	956
Arterials	1,236	2,277	3,994
% Congested Lane-Miles			
Freeways	22.6	28.8	50.5
Arterials	12.0	11.6	22.0
Daily Congested VMT			
Freeways	11,777,622	22,588,646	27,677,484
Arterials	10,095,651	19,153,038	33,478,230
% Daily Congested VMT			
Freeways	34.9	38.7	63.8
Arterials	21.8	23.6	36.1
Total Vehicle Hours of Delay			
Hours of Delay	686,069	1,436,565	2,115,615
Hrs of Delay per 1000 VMT	8.50	10.2	15.5

* Results are derived from Base Year 2008, 2030 RTP and 2030 No Build MAG model runs - August 2009
* The No-build is based on the 2008 Base Year Freeway and the Planned Arterial networks
** Resident population in households + resident population in group quarters (excluding institutional facilities, military and correctional facilities) + Transient population + Seasonal Population

doubles. The total vehicle hours of delay experiences an increase of 109 percent between the 2008 Base Year and the 2030 RTP, but dramatically increases by more than two hundred percent under the No Build scenario. Clearly, the freeway capacity added in the RTP helps significantly to mitigate the effects of a growing population. For arterials, the percentage of congested lane miles for the RTP increases by approximately three percent compared to the

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2010 Update

20-8

EXHIBIT 1

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218		Exhibits reviewed.

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Summary of Travel Trends

The trends data indicate that the *per capita* growth in travel that the U.S. experienced over the last four decades may be slowing. Statistically, of the ten major travel indicators shown in Table 3, in 2009 seven estimates were lower than the same estimate in 2001 estimates and the remainder are statistically the same (within the confidence interval).

Importantly, all of the travel estimates related to households are slightly lower in 2009 than 2001--including person and vehicle trips and the average daily person and vehicle miles generated by U.S. households. The longstanding decline in household size continued between 2001 and 2009. In addition, the average number of vehicle trips and vehicle miles of travel per driver are significantly lower than the 2001 estimate. The data shows both average person trip length and average vehicle trip length to be about the same as in 2001 (that is, within the confidence interval).

Table 3. Summary of Travel Statistics
1969, 1977, 1983, 1990, and 1995 NPTS, and 2001 and 2009 NHTS.

	1969	1977	1983	1990	1995	2001	2009	95% CI
Per Person								
Daily Person Trips	2.02	2.92	2.89	3.76	4.30	3.74	3.79	0.03
Daily PMT	19.51	25.95	25.05	34.91	38.67	36.89	36.13	1.35
Per Driver								
Daily Vehicle Trips	2.32	2.34	2.36	3.26	3.57	3.35	3.02	0.03
Daily VMT	20.64	19.49	18.68	28.49	32.14	32.73	28.97	0.71
Per Household								
Daily Person Trips	6.36	7.69	7.20	8.94	10.49	9.66	9.50	0.09
Daily PMT	61.55	68.27	62.47	83.06	94.41	95.24	90.42	3.38
Daily Vehicle Trips	3.83	3.95	4.07	5.69	6.36	5.95	5.66	0.06
Daily VMT	34.01	32.97	32.16	49.76	57.25	58.05	54.38	1.34
Per Trip								
Average person trip length (miles)	9.67	8.87	8.68	9.47	9.13	10.04	9.75	0.36
Average vehicle trip length (miles)	8.89	8.34	7.90	8.85	9.06	9.87	9.72	0.22

- Notes:
- Average trip length is calculated using only those records with trip mileage information present.
 - 1990 person and vehicle trips were adjusted to account for survey collection method changes (see 2001 Summary of Travel Trends Appendix 2).
 - PMT is Person Miles of Travel. VMT is Vehicle Miles of Travel. CI is Confidence Interval. NPTS is Nationwide Personal Transportation Survey.

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Summary of Travel Trends																																									
Figure 6. Average Time Spent In Vehicles and Miles Traveled 2001 and 2009 NHTS.																																									
<table><tr><th>Category</th><th>2001 Minutes</th><th>2001 Miles</th><th>2009 Minutes</th><th>2009 Miles</th></tr><tr><td>Rural, Not in a MSA</td><td>42</td><td>42</td><td>38</td><td>38</td></tr><tr><td>< 250M</td><td>40</td><td>40</td><td>36</td><td>36</td></tr><tr><td>250K - < 500K</td><td>38</td><td>38</td><td>34</td><td>34</td></tr><tr><td>500K - < 1M</td><td>36</td><td>36</td><td>32</td><td>32</td></tr><tr><td>1M - < 3M</td><td>34</td><td>34</td><td>30</td><td>30</td></tr><tr><td>3M+</td><td>32</td><td>32</td><td>28</td><td>28</td></tr><tr><td>Average</td><td>30</td><td>30</td><td>28</td><td>28</td></tr></table>		Category	2001 Minutes	2001 Miles	2009 Minutes	2009 Miles	Rural, Not in a MSA	42	42	38	38	< 250M	40	40	36	36	250K - < 500K	38	38	34	34	500K - < 1M	36	36	32	32	1M - < 3M	34	34	30	30	3M+	32	32	28	28	Average	30	30	28	28
Category	2001 Minutes	2001 Miles	2009 Minutes	2009 Miles																																					
Rural, Not in a MSA	42	42	38	38																																					
< 250M	40	40	36	36																																					
250K - < 500K	38	38	34	34																																					
500K - < 1M	36	36	32	32																																					
1M - < 3M	34	34	30	30																																					
3M+	32	32	28	28																																					
Average	30	30	28	28																																					
PRIVATE VEHICLE TRAVEL 22																																									
EXHIBIT 3																																									

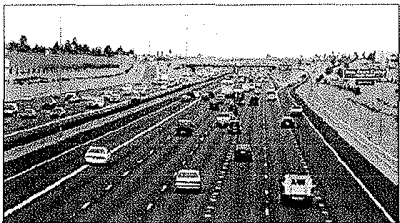
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7.1 Variation in Trip Rate-Weekday Versus Weekend

Table 7-9 indicates the variation in vehicle trip rate by day of week. The average household trip rate was highest on Saturdays. The average auto occupancy was also highest on Saturdays. However, the average vehicle trip rate was highest on a weekday (Tuesday). Weekday vehicle trip rate on any given day was higher than vehicle trip rate for Saturday or Sunday. Freeway traffic counts for the Valley indicate more volumes during weekdays than during weekends.



Vehicle Trip Rate by Day of Week			
Travel Day	Average Household Trip Rate by Day of Week	Average Occupancy by Day of Week	Average Vehicle Trip Rate by Day of Week
Sunday	9.26	2.49	3.72
Monday	9.05	1.98	4.57
Tuesday	11.04	1.52	7.26
Wednesday	11.09	1.83	6.06
Thursday	8.52	2.11	4.04
Friday	10.89	2.04	5.34
Saturday	13.67	3.44	3.97

Table 7-9 Variation in Vehicle Trip Rate by Day of Week

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	<div> <div> <p>Locations Table</p> <ol style="list-style-type: none"> 1. All home locations were geo-coded. 2. About ninety-five percent of work and school locations were geo-coded. <p>Trips Table</p> <ol style="list-style-type: none"> 1. Based upon weighted data, Auto continues to be a dominant mode of transportation. Walk trips constitute 9 percent of overall trips (but not all of these trips are modeled), while bike trips constituted about 1 percent of overall trips. The transit share of trips is slightly above 1 percent. 2. Overall auto occupancy is higher in 2008-2009 NHTS than when compared to 2001 MAG household travel survey. NHTS captured a much higher rate of HOV travel than the MAG 2001 household travel survey. 3. Work trips constitute a lower percentage of overall trips in 2008-2009 than when compared to 2001 MAG household travel survey. 4. Average trip length between home and work has increased between 2001 MAG household travel survey and 2008-2009 National Household Travel Survey dataset for MAG. The average (reported) trip length increased to 12.92 miles (weighted data for weekday) in 2008 NHTS from 10.6 miles (estimated) in 2001 survey. 5. The average daily household trip rate (weighted) in 2008 travel survey (10.50) is higher than the corresponding value in 2001 household travel survey (7.38). 6. The average vehicle occupancy (weighted) was higher during the weekends (3.44 on Saturday and 2.49 on Sunday) than during weekdays (1.88). 7. The average person trip rate was highest during a weekend and the average auto occupancy was highest during a weekend. However, the average vehicle trip rate was the highest during the weekday. </div> <div> <p>10.2 Conclusions</p> <p>Data from the NHTS Add-on surveys have been successfully used for travel demand models estimation and calibration. Data quality was either comparable to or exceeded that of similar surveys and was suitable for its intended applications. The data set contains necessary details and is easy to work with. Data imputation was required (example, for school locations) and warrants consideration of innovative GPS-based approaches.</p> <p>The performed analysis demonstrated general applicability of the survey data for analytical purposes as well as for the purposes of models estimation, calibration and validation. A few issues with the survey data were identified and analyzed. The survey had a relatively small sample of transit users, thus its applicability for some of transit modeling tasks is questionable.</p> <p>Segments like low-income households and Hispanic households were under-sampled. Targeted effort to reach these population groups will be required in future regional travel surveys. Pilot studies could be recommended prior to the original survey, concentrating on these household segments. For the 2008 NHTS, there is no record of any pilot study in the literature provided to MAG.</p> <p>The NHTS survey tour/trip production rates were found to be comparable to other surveys. Overall 2008 Add-on NHTS survey data proved to be a valuable dataset suitable for advanced transportation modeling, planning and analytical work. Emerging GPS-based methodologies should be carefully considered for future survey efforts in order to support advanced transportation models and analyses.</p> </div> </div>
120	Maricopa Association of Governments—January 2012
	EXHIBIT 5

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The average reported trip duration was 20 minutes. As shown in Table T-17, 70% of all trips were 20 minutes or shorter. Trips by Transit tended to be the longest, while those by walk and bike were the shortest. Tables T-18 through T-22 show the reported trip durations by mode for the standard trip purposes.

Table T-17 Reported Trip Durations								
Trip Duration	N	All Trips	Auto-Driver	Auto-Pass	Transit	Walk	Bike	Other
5 min or less	12588	21.5%	19.9%	23.2%	4.5%	39.4%	21.0%	5.5%
6 to 10 minutes	12101	20.9%	20.5%	23.0%	6.7%	21.6%	21.3%	10.2%
11 to 15 min	11465	19.7%	19.2%	20.9%	10.1%	19.0%	21.0%	20.4%
16 to 20 min	5703	9.8%	9.9%	9.4%	8.1%	7.3%	6.3%	15.0%
21 to 25 min	2856	4.8%	5.3%	4.1%	4.7%	2.4%	2.9%	8.2%
26 to 30 min	7320	12.4%	13.4%	10.5%	12.6%	7.2%	14.4%	20.7%
31 to 35 min	1136	1.9%	2.2%	1.4%	4.9%	.5%	1.9%	3.6%
36 to 40 min	907	1.5%	1.7%	1.0%	5.5%	.5%	1.4%	2.8%
41 to 45 min	1466	2.5%	2.9%	1.7%	8.7%	.7%	.8%	4.5%
46 to 50 min	406	.7%	.7%	.4%	5.3%	.2%	1.4%	1.9%
51 to 55 min	196	.3%	.3%	.2%	2.8%	.0%	.6%	.7%
56 to 60 min	1096	1.9%	2.0%	1.7%	9.3%	.4%	4.3%	1.7%
61 to 65 min	92	.2%	.1%	.1%	2.0%	.1%	.5%	.5%
66 to 70 min	115	.2%	.2%	.2%	1.4%	.0%	.3%	.4%
71 to 75 min	163	.3%	.3%	.2%	3.0%	.1%	.5%	.5%
76 to 80 min	56	.1%	.1%	.1%	.6%	-	.2%	.2%
81 to 85 min	35	.1%	.1%	.0%	.2%	.0%	-	.1%
86 min +	772	1.3%	1.0%	1.7%	9.5%	.6%	1.2%	3.3%
Total	58473	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Average		20.48	21.02	19.15	42.92	13.32	19.56	29.51

Base: All trips, weighted.

Table T-18 Reported Trip Durations by Trip Purpose						
Trip Duration	N	All Trips	Home-based Work	Home-based Shop	Home-based Other	Non-Home Based
5 min or less	12588	21.5%	6.3%	28.4%	23.9%	25.6%
6 to 10 minutes	12101	20.9%	9.7%	29.5%	22.5%	21.9%
11 to 15 min	11465	19.7%	17.2%	20.0%	20.9%	18.9%
16 to 20 min	5703	9.8%	11.4%	9.4%	9.2%	9.7%
21 to 25 min	2856	4.8%	6.1%	2.8%	4.6%	5.4%
26 to 30 min	7320	12.4%	27.6%	5.4%	10.6%	7.9%
31 to 35 min	1136	1.9%	3.2%	.6%	1.6%	2.3%
36 to 40 min	907	1.5%	2.8%	.8%	1.2%	1.6%
41 to 45 min	1466	2.5%	5.8%	.9%	1.8%	2.1%
46 to 50 min	406	.7%	1.4%	.4%	.5%	.7%
51 to 55 min	196	.3%	.6%	.2%	.3%	.4%
56 to 60 min	1096	1.9%	5.0%	.7%	1.2%	1.3%
61 to 65 min	92	.2%	.3%	.1%	.1%	.1%
66 to 70 min	115	.2%	.3%	.2%	.2%	.2%
71 to 75 min	163	.3%	.6%	.3%	.2%	.2%
76 to 80 min	56	.1%	.1%	-	.1%	.1%
81 to 85 min	35	.1%	.1%	-	.1%	.1%
86 min +	772	1.3%	1.6%	.5%	1.2%	1.6%
Total	58473	100.0%	6.3%	28.4%	23.9%	25.6%
Average		20.48	32.73	13.74	18.41	18.02

Base: All trips, weighted.

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Table T-19								
Reported Trip Durations by Trip Purpose for Home-based Work Trips								
Trip Duration	N	All Trips	Auto-Driver	Auto-Pass	Transit	Walk	Bike	Other
5 min or less	674	6.3%	5.9%	4.3%	-	36.5%	10.4%	6.3%
6 to 10 minutes	1040	9.7%	9.7%	7.9%	4.9%	20.3%	12.5%	12.5%
11 to 15 min	1835	17.2%	17.3%	17.0%	4.9%	17.8%	22.2%	18.8%
16 to 20 min	1218	11.4%	11.9%	9.3%	4.9%	8.1%	4.2%	9.4%
21 to 25 min	648	6.1%	6.5%	3.9%	1.4%	2.0%	5.6%	-
26 to 30 min	2951	27.6%	27.5%	33.5%	17.6%	10.2%	18.8%	31.3%
31 to 35 min	347	3.2%	3.5%	2.0%	3.5%	1.0%	1.4%	-
36 to 40 min	299	2.8%	2.8%	2.3%	6.3%	1.0%	2.8%	-
41 to 45 min	616	5.8%	5.8%	6.2%	9.9%	.5%	1.4%	3.1%
46 to 50 min	151	1.4%	1.4%	1.4%	3.5%	.5%	1.4%	-
51 to 55 min	61	.6%	.5%	.7%	3.5%	-	2.8%	-
56 to 60 min	531	5.0%	4.6%	7.7%	11.3%	-	7.6%	-
61 to 65 min	32	.3%	.2%	.3%	4.9%	-	2.1%	-
66 to 70 min	33	.3%	.3%	.1%	2.8%	-	.7%	-
71 to 75 min	59	.6%	.5%	.5%	4.2%	-	2.1%	3.1%
76 to 80 min	16	.1%	.1%	.1%	1.4%	-	.7%	-
81 to 85 min	9	.1%	.1%	.1%	.7%	-	-	-
86 min +	173	1.6%	1.2%	2.6%	14.1%	2.0%	3.5%	15.6%
Total	10692	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Average		32.73	32.05	36.85	52.04	22.01	28.72	76.95

Base: All home-based work trips, weighted.

Table T-20								
Reported Trip Durations by Trip Purpose for Home-based Shop Trips								
Trip Duration	N	All Trips	Auto-Driver	Auto-Pass	Transit	Walk	Bike	Other
5 min or less	1586	28.4%	30.4%	24.7%	3.9%	25.9%	29.1%	15.4%
6 to 10 minutes	1648	29.5%	30.6%	28.9%	9.8%	21.5%	21.8%	17.9%
11 to 15 min	1121	20.1%	19.9%	20.6%	7.8%	18.5%	27.3%	28.2%
16 to 20 min	525	9.4%	8.5%	10.9%	9.8%	13.2%	7.3%	20.5%
21 to 25 min	155	2.8%	2.7%	3.0%	5.9%	1.5%	1.8%	5.1%
26 to 30 min	303	5.4%	4.3%	6.5%	15.7%	16.1%	1.8%	7.7%
31 to 35 min	32	.6%	.6%	.1%	5.9%	.5%	1.8%	2.6%
36 to 40 min	42	.8%	.5%	1.2%	5.9%	1.0%	-	-
41 to 45 min	53	.9%	.9%	1.1%	3.9%	-	1.8%	-
46 to 50 min	25	.4%	.2%	.7%	2.0%	.5%	5.5%	-
51 to 55 min	8	.1%	.1%	.1%	3.9%	-	-	-
56 to 60 min	38	.7%	.5%	.8%	11.8%	.5%	1.8%	2.6%
61 to 65 min	3	.1%	.1%	-	-	-	-	-
66 to 70 min	11	.2%	.1%	.3%	2.0%	-	-	-
71 to 75 min	14	.3%	.1%	.3%	5.9%	.5%	-	-
76 to 80 min	-	-	-	-	-	-	-	-
81 to 85 min	-	-	-	-	-	-	-	-
86 min +	26	.5%	.3%	.6%	5.9%	.5%	-	-
Total	5590	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Average		13.74	12.75	14.94	40.40	16.08	14.53	16.82

Base: All home-based shop trips, weighted.

NuStats Research and Consulting

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Figure 7-10 shows the frequency distribution of all trips by trip duration. About 65 percent of all reported trips have duration of at the most 15 minutes. Similarly, Figure 7-11 shows the frequency distribution of all trips by trip

length. About 42 percent of all reported trips have a trip length of at the most 3 miles. From the NHTS data, the average reported trip length for HBW trip (all days) was about 12.61 miles.

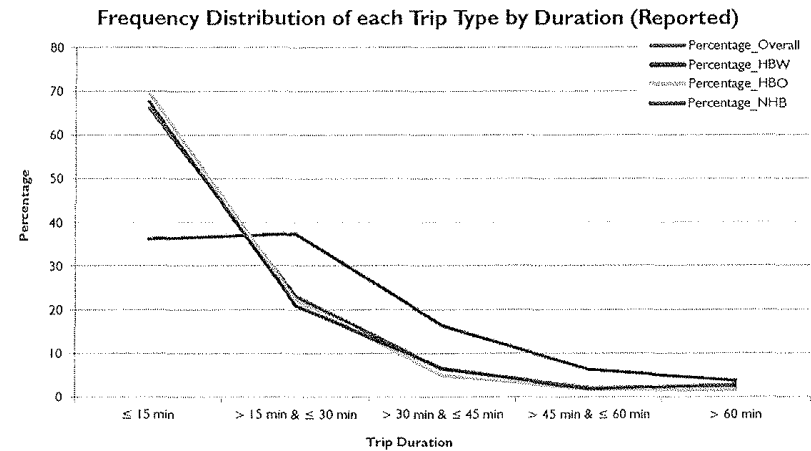


Figure 7-10 Frequency Distribution of Trip Duration by Purpose

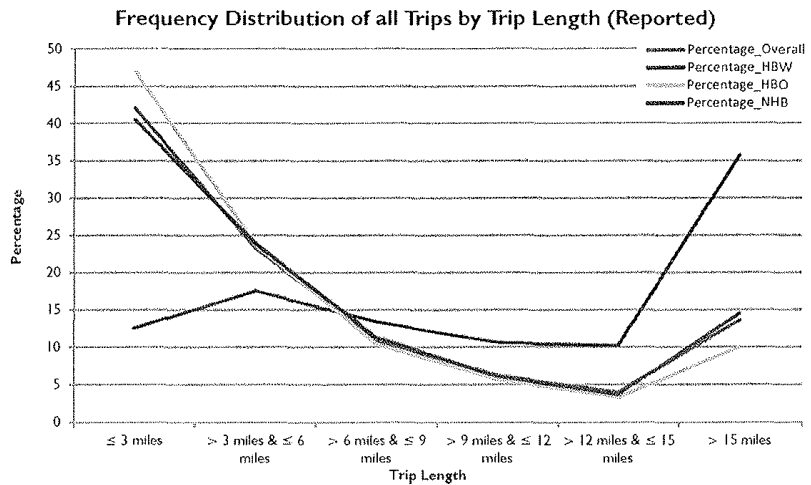


Figure 7-11 Frequency Distribution of Trip Length by Purpose

EXHIBIT 7

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Code	Comment Document
	<div>EXHIBIT 8</div> <div><p>2010 Update Regional Transportation Plan Fig. 9-3 REGIONAL TRANSPORTATION PLAN</p><p>MARICOPA ASSOCIATION of GOVERNMENTS</p><p>Planned Arterial Street Improvements</p><p>Arterial Improvements</p><p>Freeway</p><p>Existing or New Arterial</p><p>Full Freeway Interchange</p><p>HYRID ALTERNATIVE</p><p>While every effort has been made to ensure the accuracy of this information, the Maricopa Association of Governments makes no warranty, expressed or implied, as to its accuracy and expressly disclaims liability for the accuracy thereof.</p><p>0 5 10 15 Miles</p><p>© 2010, All Rights Reserved</p></div>

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	<div><div>EXHIBIT 9</div><div><p>2010 Update Regional Transportation Plan Fig. 8-4</p><p>REGIONAL TRANSPORTATION PLAN</p><p>MARICOPA ASSOCIATION of GOVERNMENTS</p><p>Plan Phasing Freeways/Highways</p><p>Phase 1 (FY 2003 - FY 2010)* Phase 2 (FY 2011 - FY 2015)* Phase 3 (FY 2016 - FY 2020)* Phase 4 (FY 2021 - FY 2025)* Phase 5 (FY 2026 - FY 2031)* Broken lines represent HOT lane phasing</p><p>Right of Way Preservation Phase 5 Includes Interim Construction Right of Way Preservation Phase 5 Freeways Other Roads County Boundary</p><p>Agreements for new freeway, highway, arterial, and light rail/high capacity transit facilities may be determined following the completion of appropriate design and environmental studies.</p><p>MAP AREA</p><p>0 5 10 15 Miles</p><p>While every effort has been made to ensure the accuracy of the information, the Maricopa Association of Governments makes no warranty, expressed or implied, as to its accuracy and expressly disclaims liability for the accuracy thereof.</p><p>© 2010, APG/Region 9</p><p>Regional transportation facilities in Pinal County are planned by the Central Arizona Association of Governments (CAAG).</p></div></div>

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Table 9. Average Daily Traffic Volumes on Arterial Streets (without the Proposed Action), 2010 and 2035

Segment		Vehicles Per Day		
		2010	2035	Change (%)
Buckeye Road	35th Avenue to 27th Avenue	34,475	34,928	1.3
	51st Avenue to 43rd Avenue	34,654	34,141	-1.5
	83rd Avenue to 75th Avenue	28,002	33,625	20.1
Baseline Road	19th Avenue to 7th Avenue	26,168	46,575	78.0
	24th Street to 32nd Street	43,815	58,482	33.5
	40th Street to 48th Street	59,984	66,748	11.3
Chandler Boulevard	24th Street to 32nd Street	21,589	29,289	35.7
	40th Street to 48th Street	25,303	32,086	26.8
	48th Street to I-10	42,300	58,464	38.2
Pecos Road	32nd Street to 40th Street	21,211	18,955	-10.6
	Desert Foothills Parkway to 24th Street	10,759	9,634	-10.5
	17th Avenue to Desert Foothills Parkway	3,708	7,440	100.6

Source: Maricopa Association of Governments, 2010a, extrapolated analysis
Note: The 2035 road network includes all of the improvements from the RTP except the proposed action.

Operational Performance of Freeways in the MAG Region

The previous section concluded that traffic volumes would increase between 2010 and 2035 because of increases in capacity (additional lanes) and demand (additional VMT). This section presents the analytical results addressing how these changes in traffic volumes would affect system efficiency in terms of level of service (LOS). The analysis focuses on the region’s freeway system and presents the duration of LOS E or F (congested conditions) as modeled by the MAG regional travel demand model. The duration of LOS E or F conditions is determined by comparing the ratio of the projected traffic volume to the capacity (2,030 vehicles per hour per lane) of the freeway segment as presented in Table 10. Figures 3 and 4 present the morning (AM) peak travel period results for 2010 and 2035, respectively. Figures 5 and 6 present the evening (PM) peak travel period results for 2010 and 2035, respectively.

Table 10. Duration LOS E or F as Volume-to-Capacity Ratio

Volume-to-Capacity Ratio	Duration LOS E or F
≤ 0.86	no congestion
> 0.86 to 1.01	less than 2 hours
> 1.01 to 1.06	from 2 to 3 hours
> 1.06	greater than 3 hours

Source: Maricopa Association of Governments, 2010a, extrapolated analysis

South Mountain Transportation Corridor – Traffic Overview

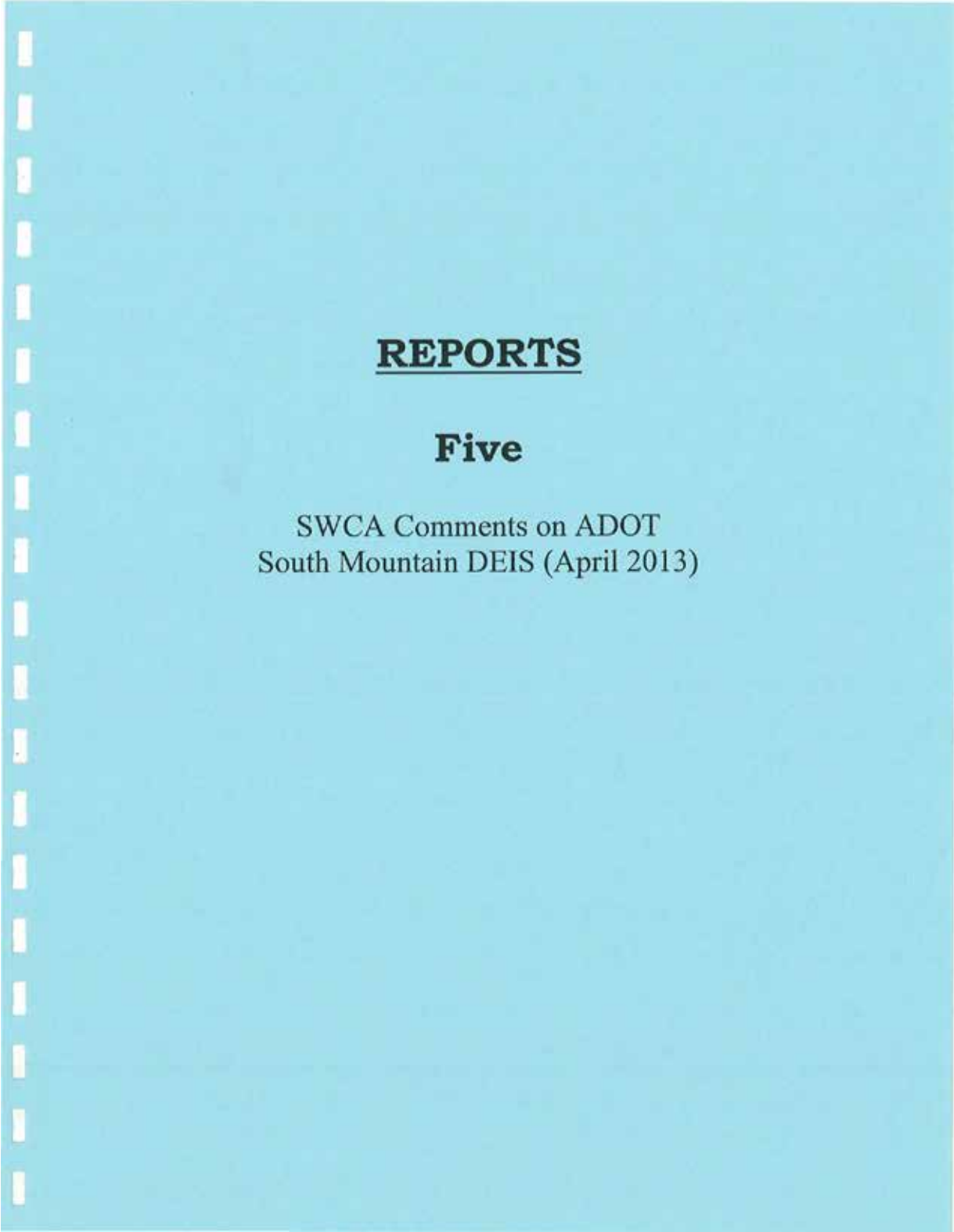
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EXHIBIT 11

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	<div>EXHIBIT 12</div> <div><p>2010 Update Regional Transportation Plan Fig. 9-3 REGIONAL TRANSPORTATION PLAN</p><p>MARICOPA ASSOCIATION of GOVERNMENTS</p><p>Planned Arterial Street Improvements</p><p>▲ Improved Intersections ◆ New/Improved Arterials ■■■ Right of Way Preservation — Freeways — Highways — Other Roads □ County Boundary</p><p>Alignments for new freeways, highways, arterials, and light rail/high capacity transit facilities will be determined following the completion of appropriate design and environmental studies.</p><p>Regional transportation facilities in Pinal County are planned by the Central Arizona Association of Governments (CAAAG).</p><p>MAP AREA</p><p>While every effort has been made to ensure the accuracy of this information, the Maricopa Association of Governments makes no warranty, expressed or implied, as to its accuracy and expressly disclaims liability for the accuracy thereof.</p><p>0 5 10 Miles</p><p>© 2010, All Rights Reserved</p></div>

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	 The image shows the front cover of a report. The cover has a light blue background. On the left side, there is a vertical strip of white with a series of small, rectangular perforations, suggesting it was part of a binder. The title 'REPORTS' is centered in a bold, black, sans-serif font. Below it, the word 'Five' is also centered in a bold, black, sans-serif font. At the bottom, the text 'SWCA Comments on ADOT South Mountain DEIS (April 2013)' is centered in a smaller, black, sans-serif font.

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SWCA Comments on ADOT South Mountain Freeway Draft EIS (April 2013) Prepared for PARC et al.

ADEQUACY OF THE NEPA ANALYSIS				
Chapter	Section/Subsection	Page(s)	Resource Area	Comment
1	All	1-22	General NEPA – Purpose and Need	Chapter 1 of the DEIS, Purpose and Need, presents a lengthy and elaborate explanation of the need for the proposed freeway (“as recognized in over 25 years of transportation planning”) based on Phoenix area growth rates from 1950 to the present day coupled with MAG growth projections to 2035. However, even if one accepts these future growth projections as reasonably accurate and that the “need” is real, there is nothing in the stated “purpose” to demonstrate why the proposed freeway remedy must be built within the selected Study Area and nowhere else. In short, other reasonable alternatives exist that could also fulfill the stated Purpose and Need, but these have been arbitrarily excluded from detailed analysis in violation of 40 CFR 1502.14. (Also see question/answer 2a of “Forty Most Asked Questions Concerning CEQ’s NEPA Regulations”: “In determining the scope of alternatives to be considered, the emphasis is on what is ‘reasonable’ rather than on whether the proponent or applicant likes or is itself capable of carrying out a particular alternative. Reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant.”)
1	All	1-22	General NEPA – Study Area	NEPA requires that the EIS “rigorously explore and objectively evaluate all reasonable alternatives [emphasis added],” including those “not within the jurisdiction of the lead agency” (40 CFR 1502.14(a) and (c)). In reviewing the April 2013 South Mountain Freeway (Loop 202) Draft Environmental Impact Statement and Section 4(f) Evaluation, we find no technical or scientific rationale or justification presented as to why the Project Study Area comprises the precise area it does. Why is it declared to fall along these particular boundaries and not others? The impression is that these boundaries were drawn for political and procedural reasons to comport with MAG’s and ADOT’s previous planning efforts, rather than to allow a comprehensive, objective NEPA assessment. Specifically, this Study Area appears configured so as to exclude freeway alternatives further south or west (including potential alternatives in Pinal or Pima Counties), thus deliberately avoiding evaluation of other “reasonable alternatives” to the Pecos Road alignment.
				Standard practice in preparing NEPA documents, per CEQ regulations at 40 CFR 1502.24 (“Methodology and Scientific Accuracy”), is to use, and to present to the public, the “best available” scientific and technical information. Moreover, in accordance with Section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Public Law 106-554; H.R. 5658), the federal Office of Management and Budget (OMB) issued Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies, which state they are “designed to help agencies ensure and maximize the quality, utility, objectivity and integrity of the information that they disseminate (meaning to share with, or give access to, the public)” and, furthermore, that “It is crucial that information Federal agencies disseminate meets these guidelines.” (OMB 2002)
All	All	All	General NEPA – Omitted, Outdated, and Inaccurate Information Used as Basis for Impact Analysis and Public Comment	It is our assessment that ADOT has failed in the South Mountain Freeway (Loop 202) Draft Environmental Impact Statement and Section 4(f) Evaluation to present to the public the “best available” scientific and technical information. This is particularly true of the following resources and associated impact analyses. Air Quality: <ul style="list-style-type: none">• The data presented in Figure 4-18 Comparison of National Economic and Demographic Growth Indicators and Air Emissions, 1970-2005, is outdated. The U.S. EPA website https://www.epa.gov/airtrends/airtrends.html#comparison provides data through 2011.• The subsection fails to include a discussion of more recent ambient monitoring data for calendar years 2011 and 2012. The MCAQD 2011 Air Monitoring Network Review is readily available (http://www.maricopa.gov/iso/divisions/monitoring/docs/pdf/2011_Network_Assessment.pdf) and should have been employed in the analysis. Furthermore, the most recent available ambient monitoring data from 2012 should have been incorporated into the DEIS. These data are available at: http://www.epa.gov/airdata/.• Figure 4-20 Nonattainment Areas for Particulate Matter, Carbon Monoxide, and Ozone, Maricopa County, is not up-to-date.

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Code	Issue	Response
219	Purpose and Need	<p>As discussed beginning on page 1-11 of the Draft Environmental Impact Statement, the proposed action is needed to serve projected growth in population and accompanying transportation demand and to correct existing and projected transportation system deficiencies. The analyses in the Draft Environmental Impact Statement used socioeconomic and traffic projections at the regional analysis zone and traffic analysis zone levels. At the time of publication of the Draft Environmental Impact Statement, Census 2010-based socioeconomic data at the regional analysis zone and traffic analysis zone levels had not been adopted by the Maricopa Association of Governments and were not available to the project team. Therefore, the data used in the Draft Environmental Impact Statement were the most appropriate information available. As presented in text beginning on page 3-1 of the Draft Environmental Impact Statement, a comprehensive alternatives development and screening process was undertaken that represented an objective, defensible, and fully disclosed logical, sequential, step-by-step process using data and expertise from multiple disciplines applied to a comprehensive set of alternatives to establish the appropriate range of reasonable alternatives for detailed study in the Draft Environmental Impact Statement.</p> <p>The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The Federal Highway Administration and the U.S. Environmental Protection Agency approved the air quality conformity determination that includes the Maricopa Association of Governments regional travel demand model that produced the traffic projections used in the traffic analysis for the project (see Final Environmental Impact Statement page 3-27). The model projects demand for multiple modes of travel, including automobile, bus, and light rail. Driving patterns and alternative modes of transportation are among the key model inputs used to forecast travel demand in the Study Area.</p>
220	Purpose and Need	<p>The parameters for delineation of the Study Area are described in Chapter 1, <i>Purpose and Need</i>, of the Draft and Final Environmental Impact Statements as the area defining the transportation problem. As presented in the chapter, transportation models were used to determine where the characteristics of the transportation problem would diminish, and, generally, it is at these locations where the definition of the Study Area took shape. This effort was coordinated with stakeholder agencies, including the U.S. Environmental Protection Agency.</p> <p>The statement that the project team excluded alternatives outside of the Study Area is not supported by the facts presented in the Draft Environmental Impact Statement. Alternatives considered in the Draft Environmental Impact Statement included many that were located outside of the Study Area. Examples include the Riggs Road Alternative (see page 3-9), the State Route 85/Interstate 8 Alternative (see page 3-9), the U.S. Route 60 Extension (see page 3-12), the Interstate 10 Spur (see page 3-12), and the Central Avenue Tunnel (see page 3-12).</p>
221		Comment noted. Specific comments are addressed below.

(Response 222 begins on next page)

Code	Comment Document
223	<div>SWCA Comments on ADOT South Mountain Freeway Draft EIS (April 2013) Prepared for PARC et al.</div> <div><p>While footnote "b" attempts to address an expansion to the 8-hour ozone nonattainment area, it does not include the Pinal County PM2.5 nonattainment area approximately 15 miles to the south of the project. An interactive GIS map available on ADOT's website identifies the current nonattainment boundaries in the vicinity of the project http://gisweb.azdhs.gov/arcgis/emap2/TopicNonattain</p><ul style="list-style-type: none">• Figure 4-24 <i>Priority Mobile Source Air Toxics Emissions, 1999, On-road Versus Other Sources</i>, presents outdated information. More recent data should have been obtained from: http://www.epa.gov/ttn/chief/eiinformation.html• While we agree the EPA transportation guidance provided on December 20, 2010, established modeling guidance for performing transportation conformity along with a 2-year grace period. However, based upon the FHWA's <i>Information: Interim Guidance Update on Mobile Source Air Toxic Analysis in NEPA</i> released on December 6, 2012, states "At the end of this grace period, i.e., beginning December 20, 2012, project sponsors should use MOVES to conduct emissions analysis for NEPA purposes." http://www.fhwa.dot.gov/environment/air_quality/air_toxics/policy_and_guidance/aginguidmem.cfm<p>Noise:</p><ul style="list-style-type: none">• Vibration from blasting is qualitatively discussed in the Topography, Geology, and Soils section of the DEIS; however, vibration from non-blasting construction activities and from operational impacts is not discussed anywhere within the DEIS. Procedures for screening and analyzing for vibrational impacts from construction and highway operation are provided in the U.S. Department of Transportation Federal Transit Administration "Transit Noise and Vibration Impact Assessment" (2006): http://www.fhwa.dot.gov/documents/FTA_Noise_and_Vibration_Manual.pdf• The DEIS notes that "To further clarify the process of noise analysis and the evaluation of noise abatement, ADOT adopted a Noise Abatement Policy (NAP), last updated in 2007" (pg. 4-80). However, the most recently issued ADOT Noise Abatement Policy is dated July 13, 2011; it superseded the 2007 version cited in the DEIS. It does not appear that the DEIS utilized the most recent ADOT Noise Abatement Policy in the noise analysis. The latest copy is available here: https://www.adot.gov/highway/EPG/EPG_Common/Documents_Technical_Noise.asp• The DEIS includes an incomplete review of the regulations regarding noise. The only regulations analyzed in the DEIS for noise impacts in any detail are those dealing with the Federal Highway Administration Noise Abatement Criteria (found in 23 CFR 772), and the ADOT Noise Abatement Plan dated 2007 (which isn't even the most up-to-date version). The following additional laws and guidelines could also impact the project:<ul style="list-style-type: none">◦ Noise Control Act of 1972, as amended (PL 92-574, 42 USC 4901 et seq.);◦ The Quiet Communities Act of 1978 (42 USC 4913) promoting the development of state and local noise control programs;◦ U.S. Department of Transportation Federal Transit Administration (FTA) guidelines that specifically addresses issues of community noise (FTA-VA-90-1003-06);◦ Occupational Safety and Health Administration (OSHA) Occupational Noise Exposure, Hearing Conservation Amendment (Federal Register 48(46):9738-9785);◦ U.S. Department of Housing and Urban Development (24 CFR 51.101(a)(8)); and◦ County, city, or local noise ordinances applicable to the project.<p>Water Resources:</p><ul style="list-style-type: none">• Analysis of water availability makes use of outdated and/or erroneous information, in two specific instances.• Water levels are referenced from 1992; more recent information is readily available from the Arizona Department of Water Resources (https://gisweb.azwater.gov/waterresourcesdata/)• A feasibility study regarding water availability in the Ahwatukee Foothills area dated 1996 is relied upon to assess viable sources of replacement water for lost groundwater wells. Reliability on this report has resulted in erroneous information, as it indicates</div>

Code	Issue	Response
222	Air Quality	<p>The data presented in Figure 4-18 of the Draft Environmental Impact Statement are included to demonstrate that emissions of criteria pollutants have decreased and continue to decrease. More recent data merely make a stronger case that these emissions have declined and do not change the conclusion.</p> <p>The monitoring data presented beginning on page 4-60 of the Draft Environmental Impact Statement demonstrate pollutant trends in the Study Area. More recent data merely make a stronger case that these emissions have declined and do not change the conclusion. Where information was deemed important to decision-making—for example, more recent trends in attainment status for various criteria pollutants—that information has been included. See for example the discussion on particulate matter that begins on page 4-61.</p> <p>Pinal County is not included in the Study Area and is, therefore, not discussed. All nonattainment areas presented in Figure 4-20 on page 4-61 of the Draft Environmental Impact Statement are current. As clarification, the title of Figure 4-20 was changed in the Final Environmental Impact Statement from “Nonattainment Areas for Particulate Matter, Carbon Monoxide, and Ozone, Maricopa County” to “Nonattainment and Maintenance Areas for Particulate Matter, Carbon Monoxide, and Ozone, Maricopa County.”</p> <p>40 Code of Federal Regulations § 93.111(c) was followed to conduct a qualitative analysis for particulate matter (PM₁₀) for the proposed action. This analysis complied with National Environmental Policy Act requirements for the development of the Draft Environmental Impact Statement. In December 2010, the U.S. Environmental Protection Agency established transportation conformity guidance for performing quantitative particulate matter (PM_{2.5} and PM₁₀) hot-spot analyses for transportation projects and established a 2-year grace period. U.S. Environmental Protection Agency conformity guidance continues to allow qualitative particulate matter (PM₁₀) hot-spot conformity analyses for analyses that were started before or during the grace period and if the final environmental document for the project is issued no more than 3 years after issuance of the draft environmental document. A particulate matter (PM₁₀) qualitative analysis was performed for this project because the initial air quality technical analysis report for the proposed action was produced in October 2005. The Arizona Department of Transportation and Federal Highway Administration have updated the qualitative analysis to a quantitative analysis for the Final Environmental Impact Statement to ensure that a state-of-the-art analysis is completed for the proposed project. The results of the analysis are summarized in the prologue to the Final Environmental Impact Statement (page xiii) and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement. The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones.</p> <p>The mobile source air toxics discussion was also updated to reflect the Federal Highway Administration's 2012 guidance. This discussion begins on page 4-77 of the Final Environmental Impact Statement.</p>
223	Traffic	<p>There are no federal requirements directed specifically to highway traffic induced vibration. All studies the highway agencies have done to assess the impact of operational traffic induced vibrations have shown that both measured and predicted vibration levels are less than any known criteria for structural damage to buildings.</p> <p>The noise analysis was updated for the Final Environmental Impact Statement using most recent Federal Highway Administration and Arizona Department of</p>

Code	Comment Document
225	<p>SWCA Comments on ADOT South Mountain Freeway Draft EIS (April 2013) Prepared for PARC et al.</p> <p>that effluent is available as a source of water. The referenced effluent plant was removed in the late 1990s and is no longer a viable source of replacement water.</p> <p>Socioeconomics:</p> <ul style="list-style-type: none">• Growth projections should have cited 2012 Arizona Department of Administration (ADOA) estimates, rather than 2005 Maricopa Association of Governments (MAG) projections—the MAG data significantly overstates future growth compared to current ADOA projections.• DEIS assessments of real estate and homes values are based on 2006 data—i.e., data from before the recent recession and housing market downturn began. This is misleading. More current datasets are available and should have been presented and used for impact analysis in the DEIS.• Though ADOA projections and other recent data sources are preferable, at the very least ADOT could have consistently utilized readily available 2010 Census data rather than 2000 Census data (no explanation is given as to why this was not done). <p>it is a great disservice to the general public and stakeholder groups for ADOT to present outdated and inaccurate data in the DEIS in its representation of environmental and social conditions around the proposed Loop 202 South Mountain Freeway. For most members of the public, the opportunity to comment on the Draft EIS is the only real chance they will have to voice their opinions and concerns.</p> <p>The impact analyses contained in the April 2013 DEIS are, in many cases, based on documents and data which are known to be inaccurate. If the inputs are flawed, the conclusions in the DEIS are likewise flawed. Thus, ADOT is presenting an EIS analysis that is not accurate, yet will likely be the only version of the document that the overwhelming majority of the public will ever have the opportunity—or ability—to comment on.</p> <p>AIR QUALITY</p> <p>The DEIS discussion is incomplete or lacking in the following areas:</p> <ul style="list-style-type: none">• There is no discussion with regard to federally listed Class I areas. The Clean Air Act and its supporting regulations are intended to protect human health, our natural and man-made environments, and to preserve visibility of scenic vistas by preventing the degradation of air quality;• Provides no quantitative or qualitative discussion on air quality impact difference between the alternatives during construction (e.g., fugitive dust emissions during construction, emissions due to concrete batch or hot-mix asphalt plants, construction workforce and non-road equipment tailpipe emissions;• Provides no discussion with regard to potential air quality impacts due to ongoing maintenance activities (i.e., re-striping, re-surfacing, landscaping, maintenance, etc.);• Provides no discussion of whether a carpooling lane will be included and the potential benefits impacts; and• Provides no clear discussion of cumulative impacts including reasonably foreseeable development.• It is unclear what vehicle traffic mix was used for the emission estimates/modeling.• It is unclear whether increases in heavy duty diesel traffic from the CANAMEX project and other truck traffic (such as commercial trucks having a haul load origin or destination in the Phoenix metro area) were included in this assessment. <p>The data presented in Figure 4-18 <i>Comparison of National Economic and Demographic Growth Indicators and Air Emissions, 1970-2005</i>, is outdated. The U.S. EPA website https://www.epa.gov/airtrends/figtrends.html#comparison provides data through 2011.</p> <p>While this section describes attainment and nonattainment areas it is completely silent on maintenance areas. This is important as the Study Area is located in a currently designated CO Maintenance Area.</p> <p>While the data provided within Table 4-27 National Ambient Air Quality Standards, is accurate and up-to-date, the actual 1-hour and annual standards for nitrogen dioxide should be listed in parts per billion (ppb). https://www.epa.gov/air/criteria.html</p> <p>3</p>
226	

Code	Issue	Response
223 (cont.)		<p>Transportation policy and traffic projections provided by the Maricopa Association of Governments in August 2013. This updated analysis begins on page 4-88 of the Final Environmental Impact Statement. No substantial differences between the analyses presented in the Draft and the Final Environmental Impact Statements resulted.</p> <p>As stated in the Council on Environmental Quality’s Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act, environmental impact statements should be analytic rather than encyclopedic (40 Code of Federal Regulations Part 1502.2(a)). Those noise regulations of direct consequence to the proposed action were discussed.</p>
224	Groundwater	<p>As noted on page 4-97 of the Draft Environmental Impact Statement, although groundwater level data in Ahwatukee Foothills Village were shown from 1972 to 1992, this information was gathered from the U.S. Geological Survey in 2009. Groundwater data in other areas may indeed be more current. This information would not alter the conclusions of this section of the Draft Environmental Impact Statement.</p> <p>The comment is correct that wastewater effluent is not available as a replacement source and is not being used. The City of Phoenix did operate a wastewater reclamation facility in this area, but it was removed from service and demolished. The City of Phoenix still owns the property, but all facilities have been removed from the site. Thus, only two water sources are available for irrigation and lake supply for the Foothills Community Association: the well that would be acquired and potable water from the City of Phoenix. The discussion on page 4-100 of the Draft Environmental Impact Statement has been modified in the Final Environmental Impact Statement to reflect that reclaimed wastewater would not be available; however, the conclusion on page 4-100 is still appropriate. As stated on page 4-100 of the Draft Environmental Impact Statement, “In the event that well replacement were to be impossible, Arizona Department of Transportation would still replace the water that would be lost through the acquisition.”</p>
225	Purpose and Need	<p>The analyses in the Draft Environmental Impact Statement used socioeconomic and traffic projections at the regional analysis zone and traffic analysis zone levels. At the time of publication of the Draft Environmental Impact Statement, Census 2010-based socioeconomic data at the regional analysis zone and traffic analysis zone levels had not been adopted by the Maricopa Association of Governments and were not available to the project team. Therefore, the data used in the Draft Environmental Impact Statement were the most appropriate information available.</p> <p>The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future.</p> <p>The new projections were also used to update the air and noise analyses for the Final Environmental Impact Statement (see sections beginning on pages 4-68 and 4-88, respectively).</p>

(Response 226 begins on next page)

Code	Comment Document	
225 227 228	SWCA Comments on ADOT South Mountain Freeway Draft EIS (April 2013) Prepared for PARC et al.	
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	AIR QUALITY	
	Ch. 4	<p>The DEIS discussion is incomplete or lacking in the following areas:</p> <ul style="list-style-type: none">There is no discussion with regard to federally listed Class I areas. The Clean Air Act and its supporting regulations are intended to protect human health, our natural and man-made environments, and to preserve visibility of scenic vistas by preventing the degradation of air quality;Provides no quantitative or qualitative discussion on air quality impact difference between the alternatives during construction (e.g., fugitive dust emissions during construction, emissions due to concrete batch or hot-mix asphalt plants, construction workforce and non-road equipment tailpipe emissions;Provides no discussion with regard to potential air quality impacts due to ongoing maintenance activities (i.e., re-striping, re-surfacing, landscaping maintenance, etc.);Provides no discussion of whether a carpooling lane will be included and the potential benefits impacts; andProvides no clear discussion of cumulative impacts including reasonably foreseeable development.It is unclear what vehicle traffic mix was used for the emission estimates/modeling.It is unclear whether increases in heavy duty diesel traffic from the CANAMEX project and other truck traffic (such as commercial trucks having a haul load origin or destination in the Phoenix metro area) were included in this assessment. <p>The data presented in Figure 4-18 <i>Comparison of National Economic and Demographic Growth Indicators and Air Emissions, 1970-2005</i>, is outdated. The U.S. EPA website http://www.epa.gov/airtrends/actrends.html#comparison provides data through 2011.</p> <p>While this section describes attainment and nonattainment areas it is completely silent on maintenance areas. This is important as the Study Area is located in a currently designated CO Maintenance Area.</p> <p>While the data provided within Table 4-27 National Ambient Air Quality Standards, is accurate and up-to-date, the actual 1-hour and annual standards for nitrogen dioxide should be listed in parts per billion (ppb). http://www.epa.gov/air/criteria.html</p>
	General Comment	Air Quality
	Figure 4-18	4-58

Code	Issue	Response
226	Air Quality	<p>Mobile sources are not regulated for impacts on visibility in Class 1 areas (40 Code of Federal Regulations § 51.307).</p> <p>Quantification of short-term impacts associated with construction or maintenance activities is not required; qualitative discussion may be found under <i>Mitigation</i> on page 4-85 of the Final Environmental Impact Statement.</p> <p>The proposed high-occupancy vehicle lane is discussed on page 3-19 of the Draft Environmental Impact Statement.</p> <p>Cumulative impacts are discussed on page 4-167 of the Draft Environmental Impact Statement.</p> <p>Vehicle traffic mix projections were provided by Maricopa Association of Governments and are consistent with the regional conformity analyses; they are discussed in greater detail in the air quality technical report prepared for the project. The results of the analyses are summarized in the Draft Environmental Impact Statement and have been updated in the Final Environmental Impact Statement. The air quality analysis has been updated for the Final Environmental Impact Statement using most recent Federal Highway Administration and U.S. Environmental Protection Agency guidance and traffic projections provided by the Maricopa Association of Governments in August 2013. This updated analysis begins on page 4-68 of the Final Environmental Impact Statement. No substantial differences between the analyses presented in the Draft and the Final Environmental Impact Statements resulted.</p>
	Trucks	<p>The Maricopa Association of Governments regional travel demand model forecasts approximately 10 percent truck traffic on the South Mountain Freeway in 2035 (see Final Environmental Impact Statement page 3-64). This percentage is similar to current conditions on Interstate 10 between Loop 101 and Interstate 17 and on U.S. Route 60. Air quality and noise modeling for the Draft and Final Environmental Impact Statements used this forecast truck traffic (see Final Environmental Impact Statement pages 4-68 and 4-100, respectively).</p>
227	Air Quality	<p>The maintenance area is discussed in the subsection, <i>Carbon Monoxide</i>, on page 4-59 Draft Environmental Impact Statement. As clarification, the title of Figure 4-20 was changed in the Final Environmental Impact Statement from “Nonattainment Areas for Particulate Matter, Carbon Monoxide, and Ozone, Maricopa County” to “Nonattainment and Maintenance Areas for Particulate Matter, Carbon Monoxide, and Ozone, Maricopa County.”</p>
228	Air Quality	<p>According to the U.S. Environmental Protection Agency, the official level of the annual nitrogen dioxide standard is 0.053 parts per million. See footnote #2 (epa.gov/air/criteria.html).</p>

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SWCA Comments on ADOT South Mountain Freeway Draft EIS (April 2013) Prepared for PARC et al.																																																													
229	<table><tr><td>Ch. 4</td><td>Subsection – Characteristics of Criteria Pollutants</td><td>4-60 thru 4-62</td><td>Air Quality</td><td><p>The subsection fails to include a discussion of more recent ambient monitoring data for calendar years 2011 and 2012.</p><p>For example:</p><ul style="list-style-type: none">According to Maricopa County Air Quality Department's 2011 Air Monitoring Network Review, there were a total of 18 unique days when at least one monitor exceeded the ozone standard. There were 70 individual exceedances of the 8-hour standards at 14 different sites. For the year there was one violation of the 8-hour ozone standard.In terms of PM10, there were 19 unique days when at least one monitor exceeded the 24-hour standard and 11 sites that violated the 24-hour standard. It should be noted that some of these exceedances were petitioned to be classified as exceptional events; however, EPA approval of these requests can take over a year.In addition, there were 9 unique days when at least one monitor exceeded the standard; however, there were no violations of the 24-hour or annual PM2.5 standards. The MCAQD 2011 Air Monitoring Network Review should have been obtained from: http://www.maricopa.gov/ad/divisions/monitoring/docs/pdf/2011_Network_Assessment.pdf<p>Furthermore, the most recent available ambient monitoring data from 2012 should have been incorporated into the DEIS and is available at: http://www.epa.gov/airdata/</p><p>Figure 4-20 Nonattainment Areas for Particulate Matter, Carbon Monoxide, and Ozone, Maricopa County, is not up-to-date. 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Ch. 4	Subsection – Characteristics of Criteria Pollutants	4-60 thru 4-62	Air Quality	<p>The subsection fails to include a discussion of more recent ambient monitoring data for calendar years 2011 and 2012.</p> <p>For example:</p> <ul style="list-style-type: none">According to Maricopa County Air Quality Department's 2011 Air Monitoring Network Review, there were a total of 18 unique days when at least one monitor exceeded the ozone standard. There were 70 individual exceedances of the 8-hour standards at 14 different sites. For the year there was one violation of the 8-hour ozone standard.In terms of PM10, there were 19 unique days when at least one monitor exceeded the 24-hour standard and 11 sites that violated the 24-hour standard. It should be noted that some of these exceedances were petitioned to be classified as exceptional events; however, EPA approval of these requests can take over a year.In addition, there were 9 unique days when at least one monitor exceeded the standard; however, there were no violations of the 24-hour or annual PM2.5 standards. The MCAQD 2011 Air Monitoring Network Review should have been obtained from: http://www.maricopa.gov/ad/divisions/monitoring/docs/pdf/2011_Network_Assessment.pdf <p>Furthermore, the most recent available ambient monitoring data from 2012 should have been incorporated into the DEIS and is available at: http://www.epa.gov/airdata/</p> <p>Figure 4-20 Nonattainment Areas for Particulate Matter, Carbon Monoxide, and Ozone, Maricopa County, is not up-to-date. While footnote "b" attempts to address an expansion to the 8-hour ozone nonattainment area further to the south, Figure 4-20 does not include the Pinal County PM2.5 nonattainment area approximately 15 miles to the south of the project. An interactive GIS map is available on ADEQ's website identifies the current nonattainment boundaries in the vicinity of the project http://gisweb.adeq.gov/arcsde/emaps/?topic=nonattain</p> <p>It is unclear what time period (i.e., year) is being presented in Figure 4-23 Sources of the 188 Hazardous Air Pollutants Regulated by the Environmental Protection Agency. Data from 2008 should have been obtained from: http://www.epa.gov/ttn/chief/einformatio.html</p> <p>Figure 4-24 Priority Mobile Source Air Toxics Emissions, 1999, On-road Versus Other Sources, presents outdated information. More recent data from 2008 should have been obtained from: http://www.epa.gov/ttn/chief/einformatio.html</p> <p>The DEIS fails to discuss the findings of Joint Air Toxics Assessment Project (JATAP) which occurred within the DEIS Air Quality Study Area. According to data collected during the Pilot Study (March 2003 – March 2004), annual average concentrations of formaldehyde, acetaldehyde, benzene and 1,3 butadiene were on the high end of the range when compared to EPA funded assessment of other U.S. cities.</p> <p>It is unclear as what year is being represented in Table 4-30 Priority Mobile Source Air Toxic Emissions, South Phoenix. Data from 2008 should have been obtained from: http://www.epa.gov/ttn/chief/einformatio.html</p> <p>The EPA transportation guidance provided on December 20, 2010, established modeling guidance for performing transportation conformity and under certain circumstances allows for a 2-year grace period. However, based upon the FHWA's Information: Interim Guidance Update on Mobile Source Air Toxic Analysis in NEPA released on December 6, 2012, states "At the end of this grace period, i.e., beginning December 20, 2012, project sponsors should use MOVES to conduct emissions analysis for NEPA purposes."</p> <p>Therefore, in accordance with FHWA guidance the CO analysis presented in the DEIS should have been updated using MOVES2010, which is the current EPA/FHWA approved model.</p> <p>It is unclear whether the maximum projected 1-hour and 8-hour CO concentrations at intersections/interchanges reported on Table 4-31 and 4-32 include background concentrations or existing permitted stationary sources in the study area.</p> <p>The DEIS lacks discussion of potential impacts with regard to ozone on a quantitative or even a qualitative level. While we agree that O3 is a regional pollutant, just because another agency is responsible for the developing plans to reduce emissions of O3 precursors does not mean that potential impacts due to ozone should have been discounted.</p> <p>The EPA transportation guidance provided on December 20, 2010, established modeling guidance for performing transportation</p>																																																									
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229	Air Quality	<p>The carbon monoxide analysis presented on page 4-65 of the Draft Environmental Impact Statement was updated on page 4-75 of the Final Environmental Impact Statement to represent current conditions. The Arizona Department of Transportation also conducted a quantitative particulate matter (PM₁₀) hot-spot analysis that is discussed on page 4-76 of the Final Environmental Impact Statement. The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones.</p> <p>As noted on page 4-76 of the Final Environmental Impact Statement, since ozone is a regional pollutant, there is no requirement to analyze potential impacts and no possibility of localized violations of ozone to occur at the project level. The Maricopa Association of Governments is responsible for developing plans to reduce emissions of ozone precursors in the Maricopa area. The Preferred Alternative is included in the <i>Regional Transportation Plan</i> that has been determined by the U.S. Department of Transportation to conform to the State Implementation Plan on February 12, 2014.</p>
230	Air Quality	<p>Pinal County is not included in the Study Area and is, therefore, not discussed. All nonattainment areas presented in Figure 4-20 on page 4-61 of the Draft Environmental Impact Statement are current. As clarification, the title of Figure 4-20 was changed in the Final Environmental Impact Statement from "Nonattainment Areas for Particulate Matter, Carbon Monoxide, and Ozone, Maricopa County" to "Nonattainment and Maintenance Areas for Particulate Matter, Carbon Monoxide, and Ozone, Maricopa County."</p>
231	Air Quality	<p>As noted in the footnote reference to Figure 4-23, the information was based on the Federal Highway Administration publication, Transportation Air Quality Facts and Figures, January 2006. The data referenced were from 1999. This figure was removed from the Final Environmental Impact Statement.</p>
232	Air Quality	<p>As noted in the footnote reference to Figure 4-23, the information was based on the Federal Highway Administration publication, Transportation Air Quality Facts and Figures, January 2006. This figure was removed from the Final Environmental Impact Statement.</p>
233	Air Quality	<p>Summary information about the findings of the Joint Air Toxics Assessment Project study is provided as background information in the Draft and Final Environmental Impact Statements, but the study itself is not relevant to the type of analysis done pursuant to the Federal Highway Administration's mobile source air toxics guidance, which is an emissions analysis. Monitored ambient concentrations of mobile source air toxics (the focus of the Joint Air Toxics Assessment Project) do not inform this type of analysis. While monitoring data can be useful for defining current conditions in the affected environment (to the extent that the monitoring data are current), they don't tell us anything about future conditions, or the impacts of the project itself, which is why an emissions analysis was performed. The mobile source air toxic analysis presented beginning on page 4-77 of the Final Environmental Impact Statement is an estimated inventory of mobile source air toxic emissions for the entire Study Area for 2025 and 2035. This approach was used because the inventory estimate accounts for changes in traffic and emissions on all roadways affected by a proposed project, and would, therefore, be a more reliable predictor of changes in exposure to mobile source air toxics.</p>

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Ch. 4	Subsection – Characteristics of Criteria Pollutants	4-60 thru 4-62	Air Quality
<p>The subsection fails to include a discussion of more recent ambient monitoring data for calendar years 2011 and 2012.</p> <p>For example:</p> <ul style="list-style-type: none">According to Maricopa County Air Quality Department's 2011 <i>Air Monitoring Network Review</i>, there were a total of 18 unique days when at least one monitor exceeded the ozone standard. There were 70 individual exceedances of the 8-hour standards at 14 different sites. For the year there was one violation of the 8-hour ozone standard.In terms of PM10, there were 19 unique days when at least one monitor exceeded the 24-hour standard and 11 sites that violated the 24-hour standard. It should be noted that some of these exceedances were petitioned to be classified as exceptional events; however, EPA approval of these requests can take over a year.In addition, there were 9 unique days when at least one monitor exceeded the standard; however, there were no violations of the 24-hour or annual PM2.5 standards. The MCAQD 2011 <i>Air Monitoring Network Review</i> should have been obtained from: http://www.maricopa.gov/ao/divisions/monitoring/docs/pdf/2011_Network_Assessment.pdf <p>Furthermore, the most recent available ambient monitoring data from 2012 should have been incorporated into the DEIS and is available at: http://www.epa.gov/airdata/</p> <p>Figure 4-20 <i>Nonattainment Areas for Particulate Matter, Carbon Monoxide, and Ozone, Maricopa County</i>, is not up-to-date. While footnote "b" attempts to address an expansion to the 8-hour ozone nonattainment area further to the south, Figure 4-20 does not include the Pinal County PM2.5 nonattainment area approximately 15 miles to the south of the project. An interactive GIS map is available on ADEQ's website identifies the current nonattainment boundaries in the vicinity of the project http://gisweb.azdeq.gov/arcgis/exapps/27topic-nonattain</p> <p>It is unclear what time period (i.e., year) is being presented in Figure 4-23 <i>Sources of the 188 Hazardous Air Pollutants Regulated by the Environmental Protection Agency</i>. Data from 2008 should have been obtained from: http://www.epa.gov/ttn/chief/einformatoin.html</p> <p>Figure 4-24 <i>Priority Mobile Source Air Toxics Emissions, 1999, On-road Versus Other Sources</i>, presents outdated information. More recent data from 2008 should have been obtained from: http://www.epa.gov/ttn/chief/einformatoin.html</p> <p>The DEIS fails to discuss the findings of Joint Air Toxics Assessment Project (JATAP) which occurred within the DEIS Air Quality Study Area. According to data collected during the Pilot Study (March 2003 – March 2004), annual average concentrations of formaldehyde, acetaldehyde, benzene and 1,3 butadiene were on the high end of the range when compared to EPA funded assessment of other U.S. cities.</p> <p>It is unclear as what year is being represented in Table 4-30 <i>Priority Mobile Source Air Toxic Emissions, South Phoenix</i>. Data from 2008 should have been obtained from: http://www.epa.gov/ttn/chief/einformatoin.html</p> <p>The EPA transportation guidance provided on December 20, 2010, established modeling guidance for performing transportation conformity and under certain circumstances allows for a 2-year grace period. However, based upon the FHWA's <i>Interim Guidance Update on Mobile Source Air Toxic Analysis in NEPA</i> released on December 6, 2012, states "At the end of this grace period, i.e., beginning December 20, 2012, project sponsors should use MOVES to conduct emissions analysis for NEPA purposes." Therefore, in accordance with FHWA guidance the CO analysis presented in the DEIS should have been updated using MOVES2010, which is the current EPA/FHWA approved model.</p> <p>It is unclear whether the maximum projected 1-hour and 8-hour CO concentrations at intersections/interchanges reported on Table 4-31 and 4-32 include background concentrations or existing permitted stationary sources in the study area.</p> <p>The DEIS lacks discussion of potential impacts with regard to ozone on a quantitative or even a qualitative level. While we agree that O3 is a regional pollutant, just because another agency is responsible for the developing plans to reduce emissions of O3 precursors does not mean that potential impacts due to ozone should have been discounted.</p> <p>The EPA transportation guidance provided on December 20, 2010, established modeling guidance for performing transportation</p>			
Ch. 4	Figure 4-20	4-61	Air Quality
Ch. 4	Figure 4-23	4-62	Air Quality
Ch. 4	Figure 4-24	4-62	Air Quality
Ch. 4	Local Emissions of Priority MSATs	4-64	Air Quality
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Ch. 4	Environmental Consequences – CO	4-65	Air Quality
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Ch. 4	Environmental	4-65	Air Quality

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234	Air Quality	The footnote to Figure 4-30 on page 4-65 of the Draft Environmental Impact Statement references data from the 2004 Joint Air Toxics Assessment Project. These data are from 2003–2004.
235	Air Quality	40 Code of Federal Regulations § 93.111(c) was followed to conduct a qualitative analysis for particulate matter (PM ₁₀) for the proposed action. This analysis complied with National Environmental Policy Act requirements for the development of the Draft Environmental Impact Statement. In December 2010, the U.S. Environmental Protection Agency established transportation conformity guidance for performing quantitative particulate matter (PM _{2.5} and PM ₁₀) hot-spot analyses for transportation projects and established a 2-year grace period. U.S. Environmental Protection Agency conformity guidance continues to allow qualitative particulate matter (PM ₁₀) hot-spot conformity analyses for analyses that were started before or during the grace period and if the final environmental document for the project is issued no more than 3 years after issuance of the draft environmental document. A particulate matter (PM ₁₀) qualitative analysis was performed for this project because the initial air quality technical analysis report for the proposed action was produced in October 2005. The Arizona Department of Transportation and Federal Highway Administration have updated the qualitative analysis to a quantitative analysis for the Final Environmental Impact Statement to ensure that a state-of-the-art analysis is completed for the proposed project. The results of the analysis are summarized in the prologue to the Final Environmental Impact Statement (page xiii) and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement. The carbon monoxide and particulate matter (PM ₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones.
236	Air Quality	The modeling protocols area is discussed in greater detail in the air quality technical report prepared for the project. The results of the analyses are summarized in the Draft Environmental Impact Statement. The carbon monoxide analyses used a background value of 2 parts per million. This has been updated in the Final Environmental Impact Statement (see page 4-75).
237	Air Quality	As noted on page 4-76 of the Final Environmental Impact Statement, since ozone is a regional pollutant, there is no requirement to analyze potential impacts and no possibility of localized violations of ozone to occur at the project level. The Maricopa Association of Governments is responsible for developing plans to reduce emissions of ozone precursors in the Maricopa area. The Preferred Alternative is included in the <i>Regional Transportation Plan</i> that has been determined by the U.S. Department of Transportation to conform to the State Implementation Plan on February 12, 2014.

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238	conformity along with a 7-year grace period. However, based upon the FHWA's information: <i>Interim Guidance Update on Mobile Source Air Toxic Analysis in NEPA</i> released on December 6, 2012, states "At the end of this grace period, i.e., beginning December 20, 2012, project sponsors should use MOVES to conduct emissions analysis for NEPA purposes." http://www.fhwa.dot.gov/environment/air_quality/air_toxics/policy_and_guidance/ajointguidenm.cfm
239	The December 20, 2010 FR notice (Vol. 75, No. 243) specifies "that any quantitative PM hot-spot analyses conducted during the grace period must use MOVES1010a, since MOBILE6.2 does not have the capabilities to produce viable results for project-level PM emissions analysis and is therefore not appropriate for this purpose."
240	Therefore, in accordance with FHWA guidance the PM analysis presented in the DEIS should have used MOVES2010, which is the current EPA/FHWA approved model.
238	The FHWA guidance specifies "the implications of MOVES on MSAT emissions estimates compared to MOBILE are" lower estimates of total MSAT emissions; significantly lower benzene emissions; significantly higher diesel PM emissions, especially for lower speeds. Consequently, diesel PM is projected to be the dominate component of the emissions totals."
241	Therefore, in accordance with FHWA guidance the MSAT analysis presented in the DEIS should have used MOVES2010, which is the current EPA/FHWA approved model.
242	Was a formal interagency consultation process conducted to determine whether the current qualitative analysis is adequate for the purpose of full disclosure of potential PM10 and PM2.5 impacts associated with the action alternatives?
243	The analysis fails to address impacts of PM2.5. This is a significant flaw as the project is within approximately 15 miles of the Pinal County PM2.5 nonattainment area.
238	The DEIS states "The implications of MOVES related to MSAT emissions estimates compared with MOBILE as used in this analysis are lower estimates of total MSAT emissions; and significantly lower benzene emissions; significantly higher DPM emissions, especially for lower speeds."
241	Therefore, in accordance with FHWA guidance the MSAT analysis presented in the DEIS should have used MOVES2010, which is the current EPA/FHWA approved model.
242	MSAT emissions and impacts during construction of proposed action and the alternatives are lacking. Furthermore, it is unclear whether morning and afternoon rush hour short-term emissions were included in the modeling?
243	It is unclear what type of vehicle is being represented by this graph (i.e., gasoline passenger vehicle, diesel passenger vehicle, heavy-duty diesel truck, etc.). The DEIS should be updated to clarify what type vehicle this represents and provide a comparison to the other vehicle classes.
238	It is unclear in both ADOT's <i>Environmental Planning Group Draft Report Air Quality Assessment South Mountain Freeway SR 2021</i> dated March 1, 2013 and the DEIS what is the breakdown of VMT for light duty/ heavy duty gasoline and diesel vehicles under the various alternatives?
238	The assessment and DEIS should have clearly specified the vehicle mix. As stated in the DEIS "The implications of MOVES related to MSAT emissions estimates compared with MOBILE as used in this analysis are lower estimates of total MSAT emissions; and significantly lower benzene emissions; significantly higher DPM emissions, especially for lower speeds."
238	Therefore, in accordance with FHWA guidance the MSAT analysis presented in the DEIS should have used MOVES2010, which is the current EPA/FHWA approved model.

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238	Air Quality	As noted on page 4-70 of the Draft Environmental Impact Statement, MOBILE6.2 was used to project emissions at a regional level consistent with 40 Code of Federal Regulations Part 93.111(c), since the mobile source air toxics analysis for the proposed action started before or during the grace period for using the MOVES2010 emissions model. However, the mobile source air toxics analysis presented on page 4-70 of the Draft Environmental Impact Statement was updated on page 4-77 of the Final Environmental Impact Statement using the MOVES2010 model.
239	Air Quality	The air quality analysis parameters were determined through the process established by the Arizona Department of Transportation interagency consultation procedures [40 Code of Federal Regulations § 93.105(c)(1) (i)].
240	Air Quality	Maricopa County is in attainment for the particulate matter (PM _{2.5}) National Ambient Air Quality Standard; the Pinal County particulate matter (PM _{2.5}) nonattainment area is not included in the Study Area.
241	Air Quality	<p>The Arizona Department of Transportation is evaluating construction delivery methods for the proposed freeway. One concept is to deliver it as a single design-build project. This method would accelerate the construction duration for the entire project to around 3 to 3.5 years. Another concept would be to deliver the project in a more traditional method, breaking the 22-mile corridor into nine segments (each 1 to 3 miles long) and constructing them in phases. Each segment would be under construction for 1 to 3 years, and the total construction duration for the entire corridor would be 5 to 6 years. A discussion of construction implementation is provided beginning on page 3-59 of the Final Environmental Impact Statement. Any particular area of the Preferred Alternative would not be expected to see construction activities beyond an approximate 2-year period.</p> <p>The mobile source air toxics analyses as presented in the Draft Environmental Impact Statement were based on average daily traffic volumes over a 1-year period. However, a quantitative project-level particulate matter (PM₁₀) hot-spot analysis has been prepared for the proposed project. The results of the analysis are summarized in the prologue to the Final Environmental Impact Statement (page xiii) and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement. For this analysis, emission factors were generated for the morning peak, midday hours, afternoon peak, and overnight. Particulate matter (PM₁₀) emissions were modeled incorporating operating conditions included in the U.S. Environmental Protection Agency's <i>Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas</i>, publication number EPA-420-B-13-053, dated November 2013. The development of the particulate matter (PM₁₀) hot-spot modeling protocol for this analysis used a formal interagency consultation process.</p>
242	Air Quality	The data presented were based on the U.S. Environmental Protection Agency's MOBILE6.2 national defaults, including the national default vehicle fleet mix.
243	Air Quality	Vehicle traffic mix projections were provided by the Maricopa Association of Governments.

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244	Ch. 4	Table 4-34	4-72	Air Quality
	ADOT's Environmental Planning Group Draft Report Air Quality Assessment South Mountain Freeway SR 202L dated March 1, 2013, which is the basis for the modeled impact results presented in the DEIS, does not account for increases in heavy duty diesel vehicles from the CANAMEX project and/or Phoenix-area origination and destination traffic, as "Average daily traffic volumes are projected to range from approximately 60,000 to over 200,000; heavy-truck traffic is expected to account for approximately 5-7% of the volume (MAG, 2010b)."			
	The potential increases to heavy-truck traffic could result in significant increases to criteria pollutant and MSAT emissions, and vehicles originating from outside of the United States may not have the same level of emission controls or diesel fuel standards. In addition, it is unclear whether the potential increases to heavy-truck traffic were considered based on the natural bypass potential of the project.			
	Ch. 4	MSAT Information Status	4-74	Air Quality
	The DEIS should have accounted for all increases in heavy-duty diesel vehicle traffic from the CANAMEX project, Phoenix-area origination and destination traffic, as well as considered additional increases due to the natural bypass potential of the project. The DEIS fails to discuss studies conducted in support of Joint Air Toxics Assessment Project (JATAP), which included air toxic measurements, numerical modeling, exposure modeling and risk assessment for the metropolitan Phoenix area. The DEIS should have included a discussion on these studies and should have been obtained from the <i>Phoenix, Arizona Air Toxics Assessment – Final Comprehensive Report</i> dated September 2011 and available at: http://www.epa.gov/ttnamtl/files/20032004csatam/CSATAMJATAPR30Sep11.pdf The DEIS fails to discuss the "Mobile Source Air Toxics (MSATs) at Three Schools Next to US 95 in Las Vegas, Nevada" (May 2010). This report was prepared for the Nevada Department of Transportation and provides a discussion on the: 1) indoor and outdoor concentrations of MSATs to which students are exposed at the three schools near US 95; 2) the influence of US 95 vehicle traffic on MSAT concentrations at the three schools, both before and after the November 2007 freeway expansion; and 3) the effectiveness and MSAT removal efficiencies of HVAC/filtration systems before and after modified air filtration systems were installed at each school. The DEIS should have included a discussion of this study as it provides a potential mitigation strategy for reducing MSAT exposure at schools.			
245	Ch. 4	MSAT Information Status	4-74	Air Quality
	Ch. 4	No-Action Alternative	4-76	Air Quality
	Ch. 4	No-Action Alternative	4-76	Conformity
246	The DEIS states "MSATs emissions for the entire regional Study Area would decline regardless of whether the proposed action were constructed." Does this statement consider increases to heavy-truck traffic associated with trucks bypassing the Phoenix downtown area as well as those from the CANAMEX project, and from Phoenix-area origination and destination traffic? Therefore, in accordance with FWHA guidance the MSAT analysis presented in the DEIS should have used MOVES2010, which is the current EPA/FHWA approved model, and should have included the projected increases in heavy truck traffic. Neither the DEIS or the supporting technical report provides the conformity determination (i.e., the conformity analysis demonstrating the project conforms).			
	Ch. 4	General Comment		Noise
The DEIS discussion is incomplete or lacking in the following areas: <ul style="list-style-type: none">Provides no discussion with regard to potential noise impacts due to ongoing maintenance activities (i.e., re-striping, re-surfacing, landscaping maintenance, etc.);Provides no clear discussion of cumulative impacts including reasonably foreseeable development; andIt is unclear what vehicle traffic mix was used for the noise modeling				

Code	Issue	Response
244	Air Quality	<p>The Mexico to Canada route (commonly referred to as the CANAMEX route) is described in detail on page 3-64 of the Draft Environmental Impact Statement. The locally preferred route includes Interstate 8 and State Route 85 to bypass the Phoenix metropolitan area. State Route 85 is currently being reconstructed as a four-lane, divided highway with limited-access control, and Interstate 8 is a four-lane, divided Interstate freeway with full access control. Existing signs at each terminus designate the route as a truck bypass of metropolitan Phoenix. This route would continue to be available for interstate and interregional travel.</p> <p>Trucks crossing from Mexico to Arizona are restricted to the commercial zones within 25 miles of the border. The Federal Motor Carrier Safety Administration is administering a United States-Mexico cross-border, long-haul trucking pilot program. The program tests and demonstrates the ability of Mexico-based motor carriers to operate safely in the United States beyond the municipalities and commercial zones along the United States-Mexico border (see <fmcsa.dot.gov/intl-programs/trucking/trucking-program.aspx>).</p> <p>Petróleos Mexicanos (better known as Pemex), the Mexican state-owned petroleum company, has guaranteed 15 parts per million in its sulfur diesel fuel in the border region (see <http://transportpolicy.net/index.php?title=Mexico:_Fuels:_Diesel_and_Gasoline>).</p> <p>All air quality analyses included projected truck traffic Provided by the Maricopa Association of Governments.</p>
245	Air Quality	<p>Summary information about the findings of the Joint Air Toxics Assessment Project study is provided as background information in the Draft and Final Environmental Impact Statements, but the study itself is not relevant to the type of analysis done pursuant to the Federal Highway Administration's mobile source air toxics guidance, which is an emissions analysis. Monitored ambient concentrations of mobile source air toxics (the focus of the Joint Air Toxics Assessment Project) do not inform this type of analysis. While monitoring data can be useful for defining current conditions in the affected environment (to the extent that the monitoring data are current), they don't tell us anything about future conditions, or the impacts of the project itself, which is why an emissions analysis was performed. The mobile source air toxic analysis presented beginning on page 4-77 of the Final Environmental Impact Statement is an estimated inventory of mobile source air toxic emissions for the entire Study Area for 2025 and 2035. This approach was used because the inventory estimate accounts for changes in traffic and emissions on all roadways affected by a proposed project, and would, therefore, be a more reliable predictor of changes in exposure to mobile source air toxics.</p>
246	Air Quality	<p>The National Near Roadway Mobile Source Air Toxic Study is discussed on page 4-74 of the Draft Environmental Impact Statement, but not in great detail. As stated in the Council on Environmental Quality's Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act, environmental impact statements should be analytic rather than encyclopedic [40 Code of Federal Regulations Part 1502.2(a)].</p> <p>The mobile source air toxics emissions information presented in the Draft and Final Environmental Impact Statements demonstrates mobile source air toxics emissions at the study area level would be much lower in the future. The U.S. Environmental Protection Agency's MOVES model also predicts lower mobile source air toxics emissions in the future. Therefore, there is no basis for the assumption that mitigation would be needed.</p>

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Ch. 4	Table 4-34	4-72	Air Quality	<p>ADOT's Environmental Planning Group Draft Report Air Quality Assessment South Mountain Freeway SR 202L dated March 1, 2013, which is the basis for the modeled impact results presented in the DEIS, does not account for increases in heavy duty diesel vehicles from the CANAMEX project and/or Phoenix-area origination and destination traffic, as "Average daily traffic volumes are projected to range from approximately 60,000 to over 200,000; heavy-truck traffic is expected to account for approximately 5-7% of the volume (MAG, 2010b)."</p> <p>The potential increases to heavy-truck traffic could result in significant increases to criteria pollutant and MSAT emissions, and vehicles originating from outside of the United States may not have the same level of emission controls or diesel fuel standards. In addition, it is unclear whether the potential increases to heavy-truck traffic were considered based on the natural bypass potential of the project.</p> <p>The DEIS should have accounted for all increases in heavy-duty diesel vehicle traffic from the CANAMEX project, Phoenix-area origination and destination traffic, as well as considered additional increases due to the natural bypass potential of the project.</p> <p>The DEIS fails to discuss studies conducted in support of Joint Air Toxics Assessment Project (JATAP), which included air toxic measurements, numerical modeling, exposure modeling and risk assessment for the metropolitan Phoenix area.</p> <p>The DEIS should have included a discussion on these studies and should have been obtained from the <i>Phoenix, Arizona Air Toxics Assessment – Final Comprehensive Report</i> dated September 2011 and available at: http://www.epa.gov/ttnamt11/files/20032004csatam/CSATAMJATAPR30Sep11.pdf</p> <p>The DEIS fails to discuss the "Mobile Source Air Toxics (MSATs) at Three Schools Next to US 95 in Las Vegas, Nevada" (May 2010). This report was prepared for the Nevada Department of Transportation and provides a discussion on the:</p> <ol style="list-style-type: none">1) indoor and outdoor concentrations of MSATs to which students are exposed at the three schools near US 95;2) the influence of US 95 vehicle traffic on MSAT concentrations at the three schools, both before and after the November 2007 freeway expansion; and3) the effectiveness and MSAT removal efficiencies of HVAC/filtration systems before and after modified air filtration systems were installed at each school. <p>The DEIS should have included a discussion of this study as it provides a potential mitigation strategy for reducing MSAT exposure at schools.</p>
Ch. 4	MSAT Information Status	4-74	Air Quality	
Ch. 4	MSAT Information Status	4-74	Air Quality	
Ch. 4	No-Action Alternative	4-76	Air Quality	<p>The DEIS states "MSATs emissions for the entire regional Study Area would decline regardless of whether the proposed action were constructed." Does this statement consider increases to heavy-truck traffic associated with trucks bypassing the Phoenix downtown area as well as those from the CANAMEX project, and from Phoenix-area origination and destination traffic?</p> <p>Therefore, in accordance with FHWA guidance the MSAT analysis presented in the DEIS should have used MOVES2010, which is the current EPA/FHWA approved model, and should have included the projected increases in heavy truck traffic.</p>
Ch. 4	No-Action Alternative	4-76	Conformity	<p>Neither the DEIS or the supporting technical report provides the conformity determination (i.e., the conformity analysis demonstrating the project conforms).</p>
NOISE				
Ch. 4	General Comment	-	Noise	<p>The DEIS discussion is incomplete or lacking in the following areas:</p> <ul style="list-style-type: none">• Provides no discussion with regard to potential noise impacts due to ongoing maintenance activities (i.e., re-stripping, re-surfacing, landscaping maintenance, etc.);• Provides no clear discussion of cumulative impacts including reasonably foreseeable development; and• It is unclear what vehicle traffic mix was used for the noise modeling

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Code	Issue	Response
247	Trucks	Vehicle traffic mix projections were provided by the Maricopa Association of Governments and are consistent with the regional conformity analyses; they are discussed in greater detail in the air quality technical report prepared for the project. As noted on page 4-70 of the Draft Environmental Impact Statement, MOBILE6.2 was used to project emissions at a regional level consistent with 40 Code of Federal Regulations Part 93.111(c), since the mobile source air toxics analysis for the proposed action started before or during the grace period for using the MOVES2010 emissions model. However, the mobile source air toxics analysis presented on page 4-70 of the Draft Environmental Impact Statement was updated on page 4-77 of the Final Environmental Impact Statement using the MOVES2010 model.
248	Air Quality	As stated on page 4-76 of the Draft Environmental Impact Statement, the proposed action is contained within the currently approved <i>Regional Transportation Plan</i> and the Maricopa Association of Government's Fiscal Year 2011–2015 TIP contains several references to the South Mountain Freeway project. Therefore, the proposed action would conform to the approved transportation plan and transportation improvement program. The carbon monoxide and particulate analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones.
249	Noise	Analysis of noise impacts associated with maintenance activities are not required by Arizona Department of Transportation and Federal Highway Administration policy. Cumulative noise impacts are addressed on page 4-176 of the Draft Environmental Impact Statement. Vehicle traffic mix projections were provided by the Maricopa Association of Governments and are consistent with the regional conformity analyses; they are discussed in greater detail in the noise technical report prepared for the project.

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250	Ch. 4	Noise Criteria	Noise
251	Ch. 4	Noise Criteria	Noise
252	Ch. 4	Table 4-40 – Noise Analysis Results, Western and Eastern Sections	Noise
253	Ch. 4	Construction Noise Inset	Noise
254	Ch. 4	Mitigation for Vibration-related Impacts Inset	Topography, Geology, and Soils
WATER RESOURCES			
255	4	Water Resources	Surface Water
7			

Code	Issue	Response
250	Noise	The noise analysis has been updated for the Final Environmental Impact Statement using most recent Federal Highway Administration and Arizona Department of Transportation policy and traffic projections provided by the Maricopa Association of Governments in August 2013. This updated analysis begins on page 4-88 of the Final Environmental Impact Statement. No substantial differences between the analyses presented in the Draft and the Final Environmental Impact Statements resulted.
251	Noise	As stated in the Council on Environmental Quality’s Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act, environmental impact statements should be analytic rather than encyclopedic [40 Code of Federal Regulations Part 1502.2(a)]. Those noise regulations of direct consequence to the proposed action were discussed.
252	Noise	As stated on page 4-82 of the Draft Environmental Impact Statement, over 220 sensitive receivers were evaluated from a traffic noise perspective. All of the receivers represent noise sensitive land uses in proximity to the proposed project. These receivers were closer to the proposed action than the schools listed; therefore, these receivers would have higher noise levels than the schools more distant from the proposed action. Analysis of noise impacts is conducted in accordance with Arizona Department of Transportation and Federal Highway Administration policy.
253	Noise	The measurements were collected during the construction of State Route 202L (Red Mountain Freeway) near Mesa Drive. This information has been added to the text box on page 4-98 of the Final Environmental Impact Statement.
254	Noise	There are no federal requirements directed specifically to highway traffic induced vibration. All studies the highway agencies have done to assess the impact of operational traffic induced vibrations have shown that both measured and predicted vibration levels are less than any known criteria for structural damage to buildings.
255	Water Resources	The specific water quality constituents that cause the impairment change from year to year as the Arizona Department of Environmental Quality and U.S. Environmental Protection Agency assess and evaluate the water quality standards; therefore, the specific contaminants from the Section 303(d) list are not noted in the Draft Environmental Impact Statement. The primary constituent that causes impairment (total dissolved solids) is discussed on page 4-93 of the Draft Environmental Impact Statement. Specific best management practices would not be known until final design when the stormwater pollution prevention plan would be developed. The Flood Control District of Maricopa County has shared drainage systems with the municipalities and stormwater discharges that have the potential to reach the Salt and Gila rivers; therefore, the Flood Control District of Maricopa County has established and implemented monitoring requirements to comply with Arizona Pollutant Discharge Elimination System regulations, as discussed beginning on page 4-93 of the Draft Environmental Impact Statement. Discussion of Arizona Pollutant Discharge Elimination System requirements and the Arizona Department of Transportation’s permit requirements through individual permits begins on page 4-94 of the Draft Environmental Impact Statement.

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256	4	Water Resources	4-93	<p>specific criteria are not discussed.</p> <p>The specific water quality constituents are not identified that cause the impairment of these waters. This lack of disclosure prevents full analysis of the expected impact to these impaired waters due to both construction and operation of the proposed freeway.</p> <p>The analysis concludes that "Implementation of BMPs associated with any of the action alternatives would reduce water quality impacts on the receiving waters of the Salt and Gila rivers. Both construction and operational impacts may be mitigated through the use of BMPs." (page 4-101) This conclusion is not supported by the existing disclosure. Without disclosure of 1) the types of impairment on the Salt and Gila Rivers, 2) the specific monitoring/mitigation required under the ADOT Stewardship permit, and 3) analysis of the types of contaminants to be discharged from the project, the conclusion as stated is arbitrary and unsupported.</p> <p>Specific to the impaired waters, the analysis also concludes that "Increased pollutant loading from freeway operation might further impair listed reaches of the Salt River and might need measures in addition to existing permit controls to achieve or maintain water quality standards in accordance with CWA Section 303(d)." (page 4-97) This analysis is incomplete. It would be reasonable to extend the analysis to disclose a) what measures might be needed, and b) whether those measures would be effective. Without disclosure of 1) the type of impairment, 2) the types of contaminants, and 3) the prescribed mitigation measures and their effectiveness, disclosure of impacts to the impaired waters is partial and limited.</p> <p>The impaired waters should be identified on at least one of the maps included in the Water Resources section. Instead they appear in the Waters of the U.S. section later in the DEIS.</p>
257	4	Secondary and Cumulative Impacts	4-173	<p>This analysis indicates in several places that along the Eastern route, surface water discharge would be routed onto lands owned by the Gila River Community, and that this currently occurs. "The drainage design features of the E1 Alternative would be such that drainage patterns from the South Mountains toward the Gila River would not be altered. Currently, drainage flows generally from the north to the south, passing under Pecos Road through a series of culverts following natural drainages/ washes. The E1 Alternative would include small drainage basins and channels on the northern side of the freeway to treat the water quality and meter and direct drainage flows under the freeway and onto Community land in the same manner as they are currently." (4-98)</p> <p>This passage highlights a general lack in the Cumulative Impacts section of the EIS. The fundamental first step in assessing cumulative impacts is to define what other Reasonably Foreseeable Actions overlap the project in both time and space. No list of Reasonably Foreseeable Actions is provided in the DEIS. Lacking this fundamental background information results in an inadequate framework for assessing cumulative impacts.</p> <p>From the analysis of cumulative impacts of water resources, the reasonably foreseeable actions considered appear to be fairly generic. Specifically, the potential for development along the south side of the Eastern alignment, on the Gila River Indian Community, ought to have been explicitly assessed for its likelihood of occurring. Potential development in this area has a high likelihood of changing the location of stormwater discharges and the impact of those stormwater discharges.</p> <p>The future discharge of stormwater is stated as being identical to that occurring at present. This is a valid method of identifying any direct impacts from the project. It is not, however, a valid method of identifying any cumulative impacts from the project, as there may be reasonably foreseeable development south of Pecos Road that would alter conditions from the current situation.</p> <p>Analysis of impacts as required under NEPA and other laws has several fundamental components:</p> <ol style="list-style-type: none">1) The "best available scientific and technical information" shall be used (CEQ)2) The analysis is not arbitrary (Administrative Procedures Act)3) Resources are interrelated and the direct impacts on one resource may engender indirect impacts on other resources; these indirect impacts must be assessed (CEQ)
258	4	Water Resources	4-100	<p>Groundwater</p>

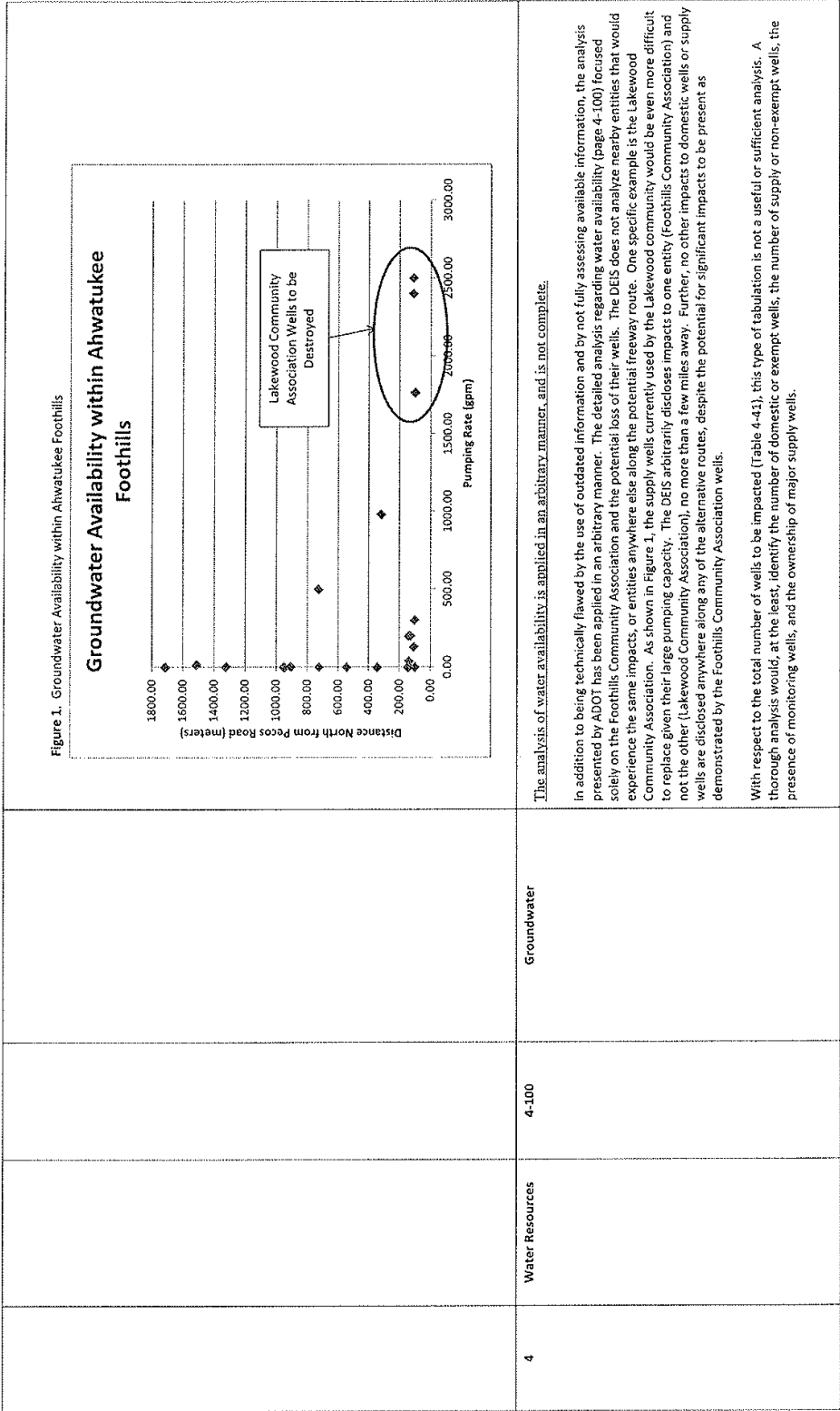
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Code	Issue	Response
256	Waters of the US	A reference to the figure on which the impaired waters are shown has been added to the discussion on page 4-101 of the Final Environmental Impact Statement. The sentence, "Several reaches of the Salt and Gila rivers are on the Section 303(d) list, including that portion of the Salt River in the Study Area" has been modified to read: "Several reaches of the Salt and Gila rivers are on the Section 303(d) list, including that portion of the Salt River in the Study Area (see Figure 4-36 on page 4-116)."
257	Secondary and Cumulative Impacts	<p>As noted on page 4-171 of the Draft Environmental Impact Statement, the type of activities that could contribute to cumulative impacts included general development patterns. Development on the Gila River Indian Community is a tribal function and requires no approval from other jurisdictions or notice to other jurisdictions regarding pending development. As a result, development along the Gila River Indian Community boundary is speculative. It is, however, difficult to conceive of a development project on the Gila River Indian Community that would cause upstream impacts to the level described in the comment. As noted in the comment, according to 46 <i>Federal Register</i> 18026 (March 23, 1981), an environmental impact statement must discuss reasonably foreseeable actions. These are actions that are likely to occur or probable, rather than those that are merely possible.</p> <p>The Federal Highway Administration and Arizona Department of Transportation have committed to continue coordination with the Arizona Game and Fish Department, Gila River Indian Community Department of Environmental Quality, and U.S. Fish and Wildlife Service regarding wildlife concerns as a result of the freeway (see <i>Mitigation</i>, beginning on page 4-126 of the Draft Environmental Impact Statement and on page 4-138 of the Final Environmental Impact Statement).</p>
258		Specific comments are addressed below.

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259	SWCA Comments on ADOT South Mountain Freeway Draft EIS (April 2013) Prepared for PARC et al.		
	4	Water Resources	Groundwater
		4-100	
	<p>The disclosure of impacts on water availability is insufficient with respect to these three fundamental requirements: 1) the analysis does not make use of the best available information, 2) application of the analysis is applied in an arbitrary manner, and 3) interrelated indirect impacts are insufficiently analyzed. Each of these three components is addressed individually below.</p> <p>The analysis of water availability does not use the "best available scientific and technical information."</p> <p>Concerns were raised to ADOT through the scoping process about the destruction of supply wells located along the Eastern alternative (Pecos Road). ADOT appears to be aware of these concerns, as an attempt is made to directly address them on page 4-100 of the DEIS. This page specifically analyzes wells used for water supply for the Foothills golf courses. The analysis included on page 4-100 makes use of information that is both outdated and erroneous. This leads to an insufficient analysis that does not make use of the "best available scientific and technical information". There are three major concerns:</p> <ol style="list-style-type: none">1. The sole information utilized (a report from 1996) is seriously out-of-date. A 17-year period in a rapidly growing community like the Ahwatukee Foothills Village has resulted in the use of a report that is no longer either reliable or appropriate to use.2. Based on information in the 1996 report, ADOT identifies that the Foothills Community Association has multiple sources of water available other than the supply wells to be lost: effluent, well water, and municipal water supplied by the City of Phoenix. Because ADOT used outdated information, the analysis does not disclose to the reader that effluent is entirely unavailable within the area. The wastewater treatment plant referenced in the DEIS was removed by the City of Phoenix in the late 1990s. This key information that--effluent is completely unavailable--was reportedly made available to ADOT. It was not, however, used in the analysis of water supply availability. Using outdated information has led to the use of an erroneous assumption—that effluent is available for use. This disclosure does not reflect the "best available scientific and technical information."3. The analysis of water replacement on page 4-100 is flawed in another way. The analysis states: "According to comments received, several wells have been drilled in the area and have either produced small amounts of water or no water." The difficulty this presents is summarized as such: "It is understood that finding a suitable location for a new well in this area may be difficult." Most of the analysis is dedicated to the process that would be undertaken to drill a new well, despite the difficulty that would be encountered in doing so. This difficulty is dismissed by indicating there are at least two other sources of water: effluent and municipal water. As indicated above, effluent is not a viable water source. <p>The statement that drilling a new well "...may be difficult" seriously downplays the importance of the wells that will be lost, the unique hydrogeology of this area, and the rarity of how productive these particular wells are. The relative difficulty in finding water north from Pecos Road is illustrated in Figure 1 below, which illustrates data from 27 wells between roughly 40th Street and Desert Foothills Parkway (Source: ADWR Well Registry, https://gisweb.azwater.gov/waterresourcesdata/WellRegistry.aspx, accessed 6/22/13). The wells to be lost are the most productive in the community. Farther north from Pecos Road most wells appear to be completed in bedrock rather than alluvium, as reflected by the much lower (or non-existent) pumping rates. This well information is readily available, and in fact was used by ADOT (page 4-96) solely for illustrative purposes. It was not, however, used in order to prepare a full disclosure of the impacts when these unique supply wells along Pecos Road are lost. Again, the analysis does not use the "best available scientific and technical information."</p> <p>It should be noted that other independent studies regarding the difficulty of sinking new wells in the area were also made available to ADOT (i.e., Brown and Caldwell, 1995), but do not appear to have been used.</p>		

Code	Issue	Response
259	Water Resources	<p>Page 4-100 of the Draft Environmental Impact Statement states that finding a suitable location for a new well in this area may be difficult. Productivity of the well in bedrock formations is primarily based on intercepting fractures, and that can be very difficult to do. The Arizona Department of Transportation is aware of the difficult conditions that exist in replacing wells in this area. The Arizona Department of Transportation is also aware of the productivity of the well in question.</p> <p>The comment is correct that wastewater effluent is not available as a replacement source and is not being used. The City of Phoenix did operate a wastewater reclamation facility in this area, but it was removed from service and demolished. The City of Phoenix still owns the property, but all facilities have been removed from the site. Thus, only two water sources are available for irrigation and lake supply for the Foothills Community Association: the well that would be acquired and potable water from the City of Phoenix. In this Final Environmental Impact Statement, the discussion on page 4-100 of the Draft Environmental Impact Statement has been modified in the Final Environmental Impact Statement to reflect that reclaimed wastewater would not be available; however, the conclusion on page 4-100 is still appropriate. As stated on pages 4-100 of the Draft Environmental Impact Statement, "In the event that well replacement were to be impossible, the Arizona Department of Transportation would still replace the water that would be lost through the acquisition."</p> <p>Depending on whether an action alternative were to become the Selected Alternative, it may be possible to keep certain wells in their current location, but move the well controls and associated piping to outside of the right-of-way. Such an analysis would be performed later in the design process.</p> <p>If a well were adversely affected by construction activities, the well might need to be abandoned or the well owner would be compensated by drilling a new well according to State regulations/standards (see text box on page 4-100 of the Draft Environmental Impact Statement). The number of wells potentially affected would be consistent with that of a project the magnitude of the proposed action, and the well replacement program as outlined by State law has been regularly implemented by the Arizona Department of Transportation to effectively mitigate well impacts associated with its projects throughout the region.</p>

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Code	Issue	Response
260		Comment noted.
261	Water Resources	<p>Because of the public concern expressed during the environmental impact statement process, page 4-100 of the Draft Environmental Impact Statement focuses on the Foothills Community Association to provide more details on the well acquisition, condition assessment, and replacement process used by the Arizona Department of Transportation. The Arizona Department of Transportation understands, and states on page 4-100 of the Draft Environmental Impact Statement, that finding a suitable location for a new well in this area may be difficult.</p> <p>Depending on whether an action alternative were to become the Selected Alternative, it may be possible to keep certain wells in their current location, but move the well controls and associated piping to outside of the right-of-way. Such an analysis would be performed later in the design process.</p> <p>Table 4-41, on page 4-98 of the Draft Environmental Impact Statement, discloses the number of wells that may be acquired by each action alternative and, as noted on page 4-98 of the Draft Environmental Impact Statement, some of these wells are abandoned wells. This information was updated in the Final Environmental Impact Statement on page 4-106. The comment suggests that the wells that would be adversely affected should be further classified as domestic, supply, or monitoring, and well ownership should be noted. This additional level of detail would not assist the environmental impact statement decision-making process.</p>

Code		Comment Document	
SWCA Comments on ADOT South Mountain Freeway Draft EIS (April 2013) Prepared for PARC et al.			
4	Water Resources	4-100	Groundwater
<p>The analysis of water availability fails to take into account significant indirect effects.</p> <p>Analysis of impacts under NEPA does not require that speculative impacts be assessed, but it does require that reasonably foreseeable impacts be addressed, and in particular indirect impacts that may affect another resource. The DEIS fails to disclose significant adverse indirect impacts resulting from the loss of these supply wells.</p> <p>ADOT states that there are three sources of water: effluent, groundwater, and municipal water. The best available scientific and technical information indicates that two of these sources—effluent and groundwater—are either completely unavailable or their availability is going to be challenging. That leaves only one source of water: municipal water from the City of Phoenix. The DEIS correctly states that City of Phoenix water is significantly more expensive than groundwater. It does not, however, fully investigate the impact of this cost.</p> <p>There are two reasonably foreseeable outcomes if only City of Phoenix water is available:</p> <ol style="list-style-type: none">1) The golf courses within the Foothills community become economically infeasible. There are several analogs that suggest this is a reasonable effect. One course in the Ahwatukee area has recently closed because of financial difficulties. One other course already has seasonal shutdowns due to water expenses. State law restricts increases of association fees, making associations relatively unresponsive to large increases in costs. That increased costs of water would have a negative effect is not speculative. The economic fallout from the loss of a golf course—not only to the course owner and operator but to the many homeowners with home values that would be impacted—is reasonably foreseeable and should have been disclosed as an indirect environmental impact of losing supply wells.2) The lakes within the Lakewood community would likely also become economically infeasible, for the same reasons. These are large lakes that require significant amounts of water. The costs of supplying municipal water to these lakes would be prohibitive, and the association would not be able to raise fees to respond (in Arizona HOA fee increases are statutorily capped at a maximum of 5% per annum). These lakes are the centerpiece of the Lakewood community. The loss of these lakes would have a significant negative impact on homeowners in the area, including to neighborhood property values, recreational opportunities, and aesthetic values. The loss of these lakes is reasonably foreseeable and should have been disclosed as an indirect environmental impact of losing supply wells. <p>Based on the above concerns, the assessment of cumulative impacts of water availability is lacking. The DEIS states: "Ongoing planned and permitted residential, commercial, and industrial development in the region would likely continue to place a demand on water availability. The proposed action would have little cumulative effect on water availability." (emphasis added)</p> <p>Given the outcomes of attempting to replace water lost to both Foothills Community Association and Lakewood Community Association, there would be stresses placed on other aspects of the water delivery system within the City of Phoenix. This has not been analyzed properly as either a direct, indirect, or cumulative impact.</p> <p>A comment typical throughout the document, but specific to groundwater resources is the use of outdated information. Specifically, groundwater levels are shown from 1992, almost 20 years in the past.</p> <p>If new information is not available, it is the responsibility of the agency to either obtain that information, or state clearly why that cannot be done. (CEQ Regs 1502.22)</p> <p>Curiously, elsewhere in the document "Topography, Geology, and Soils" more up-to-date groundwater levels are presented.</p> <p>The analysis of water quality is insufficient. While existing background water quality (page 4-97) is of interest, the more important concern is the potential for the proposed freeway route to impact known areas of contamination. This is not disclosed in the assessment of water resources. There are several basic and readily available data sources that should have been consulted for this analysis. At a</p>			
4	Secondary and Cumulative Impacts	4-173	Water Availability
<p>Based on the above concerns, the assessment of cumulative impacts of water availability is lacking. The DEIS states: "Ongoing planned and permitted residential, commercial, and industrial development in the region would likely continue to place a demand on water availability. The proposed action would have little cumulative effect on water availability." (emphasis added)</p> <p>Given the outcomes of attempting to replace water lost to both Foothills Community Association and Lakewood Community Association, there would be stresses placed on other aspects of the water delivery system within the City of Phoenix. This has not been analyzed properly as either a direct, indirect, or cumulative impact.</p> <p>A comment typical throughout the document, but specific to groundwater resources is the use of outdated information. Specifically, groundwater levels are shown from 1992, almost 20 years in the past.</p> <p>If new information is not available, it is the responsibility of the agency to either obtain that information, or state clearly why that cannot be done. (CEQ Regs 1502.22)</p> <p>Curiously, elsewhere in the document "Topography, Geology, and Soils" more up-to-date groundwater levels are presented.</p> <p>The analysis of water quality is insufficient. While existing background water quality (page 4-97) is of interest, the more important concern is the potential for the proposed freeway route to impact known areas of contamination. This is not disclosed in the assessment of water resources. There are several basic and readily available data sources that should have been consulted for this analysis. At a</p>			
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<p>Curiously, elsewhere in the document "Topography, Geology, and Soils" more up-to-date groundwater levels are presented.</p> <p>The analysis of water quality is insufficient. While existing background water quality (page 4-97) is of interest, the more important concern is the potential for the proposed freeway route to impact known areas of contamination. This is not disclosed in the assessment of water resources. There are several basic and readily available data sources that should have been consulted for this analysis. At a</p>			

Code	Issue	Response
262	Water Resources	<p>The comment is correct that wastewater effluent is not available as a replacement source and is not being used. The City of Phoenix did operate a wastewater reclamation facility in this area, but it was removed from service and demolished. The City of Phoenix still owns the property, but all facilities have been removed from the site. Thus, only two water sources are available for irrigation and lake supply for the Foothills Community Association: the well that would be acquired and potable water from the City of Phoenix. In the Final Environmental Impact Statement, the discussion on page 4-100 of the Draft Environmental Impact Statement has been modified to reflect that reclaimed wastewater would not be available (see page 4-108 of the Final Environmental Impact Statement); however, the conclusion on page 4-100 is still appropriate. As stated on page 4-100 of the Draft Environmental Impact Statement, "In the event that well replacement were to be impossible, Arizona Department of Transportation would still replace the water that would be lost through the acquisition."</p> <p>Page 4-100 of the Draft Environmental Impact Statement states that finding a suitable location for a new well in this area may be difficult. Productivity of the well in bedrock formations is primarily based on intercepting fractures, and that can be very difficult to do. The Arizona Department of Transportation is aware of the difficult conditions that exist in replacing wells in this area.</p> <p>The procedure identified on page 4-100 of the Draft Environmental Impact Statement defines the procedure that the Arizona Department of Transportation would use to replace adversely affected wells, and also identifies the general costs the Arizona Department of Transportation would incur to replace the lost water sources. As noted in this discussion, if it were necessary to provide replacement water instead of a new well, the Arizona Department of Transportation would, in negotiations with the well owner, include the difference between the costs of pumping the well and the costs of the new replacement water source.</p> <p>Depending on whether an action alternative were the Selected Alternative, it may be possible to keep certain wells in their current location, but move the well controls and associated piping to outside of the right-of-way. Such an analysis would be performed later in the design process.</p>
263	Water Resources	<p>As noted on page 4-97 of the Draft Environmental Impact Statement, although groundwater level data in Ahwatukee Foothills Village were shown from 1972 to 1992, this information was gathered from the U.S. Geological Survey in 2009. Groundwater data in other areas may indeed be more current; however, this additional level of detail would not assist the environmental impact statement decision-making process.</p>
264	Hazardous Materials	<p>Both the Van Buren Tank Farm and the West Van Buren Water Quality Assurance Revolving Fund site were identified and considered during development of the Draft Environmental Impact Statement (see pages 4-97 and 4-153 of the Draft Environmental Impact Statement and the Draft Initial Site Assessment prepared for the proposed project). These sites are primarily groundwater-impact sites, and groundwater is found at a depth of over 60 feet below the footprint of the Preferred Alternative. Given the separation distance between the adversely affected medium (groundwater) and the construction zone (near-surface in these locations), the project team determined that these sites would not pose a risk to construction or to the general public once the facility were completed. This assessment has been clarified in the Final Environmental Impact Statement on page 4-165.</p>

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265	4	Waters of the U.S.	4-112 Waters of the U.S. minimum: 1) known Leaking Underground Storage Tank (LUST) sites, 2) known State (WQARF) or Federal (CERCLA) superfund sites, and 3) known or suspected landfills, either historic or active (the location along the Salt River makes this a particularly important item to assess in the DEIS). The DEIS states: "The general and special conditions of the Section 404 Individual Permit would minimize impacts on jurisdictional waters to the extent practicable. ADEQ would issue Section 401 Individual certification for compliance with water quality prior to Section 404 permit issuance." The issuance of the Section 401 Individual certification in light of the impaired nature of the Salt and Gila River should have been discussed.
SOCIOECONOMICS			
266	1	Context of the purpose and need	1-1, 1-5 Socioeconomics Purpose and Need (Chapter 1) states that demand for travel is based on capacity, transportation demand, and social and economic needs. Chapter 1 further states that MAG's regional travel demand model is used to forecast travel demand and that one of the inputs used includes socioeconomic data based on population and economic forecasts. Data used throughout the DEIS for projected population estimates are not consistent with Arizona Department of Administration estimates (see below). Population project estimates used throughout the DEIS are higher than the state range of estimates. Therefore, inputs into the travel demand model are likely skewing the model output, which is the foundation of two of the three elements of the project purpose and need. In the DEIS, projected growth estimates Maricopa County population to be 6.5 million by 2035 (citing MAG 2009b), however 2012 population projections estimated for Maricopa County by the Arizona Department of Administration (ADOA) estimate population in the county to be 5.2 million (low), 5.7 million (medium), or up to 6.2 million (high). http://www.workforce.ar.gov/population-projections.aspx Therefore the DEIS is using a population estimate for the County that is not consistent with the state's estimates. The DEIS estimates are 1.3 million to 300,000 more than state recognized projections. The ADOA estimates are intended "provide reliable unbiased projections of future population growth and a single state repository for current population references enabling sound planning and decision making by government and private entities." No indication is provided as to why a new system for projections is used and why it is so inconsistent with the ADOA estimates.
267	1	Purpose and Need	1-11 Socioeconomics DEIS states that 50% of the 6.5 million in population growth is expected to occur in areas that would be immediately served by the proposed action. This freeway is intended to be part of a regional transportation system intended to improve regional connectivity, regional capacity, etc. (see DEIS page 1-10). Therefore statement about service area is irrelevant to the purpose and need.
	1, 3, 4	Study Area	Socioeconomics Study Area is not well defined. Chapter 1 states that it is limited to southern Phoenix metropolitan area (page 1-1), while Chapter 3 further defines the study area in a figure caption (Figure 3-1). Chapter 3 defines the study area as the southwestern portion of Maricopa County, defined by a gap in the freeway network, limited by South Mountain and GRIC. No discussion is included of why there is a gap in the transportation network here, and why this is the only gap area. Why couldn't the study area and therefore alternatives include a connection south of the Gila River Indian Community (i.e., in Pinal County), or along Biggs Road or Queen Creek Road within the GRIC? This study area is further used in Chapter 4 when discussing social and economic conditions and impacts. As above, the South Mountain Freeway is a regional freeway serving broader regional needs; therefore, for the purpose of the socioeconomic analysis, the study area is too restrictive. There is no reason the study area can't be different for socioeconomic than for other resources.
4	4	Regional Demographic context	Socioeconomics Regarding population growth, see comment above. Projections are higher and potentially inflated with no explanation as to why a different source is used and why the estimates are different.
4	4	Population and Employment	Socioeconomics It would be more appropriate to use a range of projection estimates as provided by ADOA. Using ADOA estimates for Maricopa County for 2035, population will increase 50-75% (not 85%) between 2005 and 2035. Projections on the ADOA website are from 2012 while projections in the DEIS are from 2009 or earlier (MAG 2009b).
4	4	Population and	Socioeconomics Per CEQ regulations, agencies are required to use the best available data in the analysis and in the decision making process. Data

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Code	Issue	Response
265	Water Resources	According to 33 Code of Federal Regulations 323.3, a permit is required for discharges of dredged or fill material into waters of the United States. As noted on page 4-110 of the Draft Environmental Impact Statement, as design proceeds, the Arizona Department of Transportation would prepare and submit an application to the U.S. Army Corps of Engineers for a permit under Section 404 of the Clean Water Act. Steps are outlined beginning on page 4-110 of the Draft Environmental Impact Statement. Minimization of impacts would be achieved and unavoidable impacts would be mitigated to the extent reasonable and practicable. These steps are outlined beginning on page 4-110 of the Draft Environmental Impact Statement.
266	Purpose and Need	The analyses in the Draft Environmental Impact Statement used socioeconomic and traffic projections at the regional analysis zone and traffic analysis zone levels. At the time of publication of the Draft Environmental Impact Statement, Census 2010-based socioeconomic data at the regional analysis zone and traffic analysis zone levels had not been adopted by the Maricopa Association of Governments and were not available to the project team. Therefore, the data used in the Draft Environmental Impact Statement were the most appropriate information available. The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future.
267	Purpose and Need	The Draft Environmental Impact Statement does not state that there would be 6.5 million in population growth. In 2005, there were already 3.7 million people in Maricopa County, so the increase between 2005 and 2035 would be 2.8 million people, and 44 percent of that growth would occur in the area served by the proposed freeway. This information supports the definition of the Study Area and the need for a major transportation system in the southwestern portion of the Phoenix metropolitan area.

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4	Waters of the U.S.	4-112	Waters of the U.S.	<p>minimum: 1) known Leaking Underground Storage Tank (LUST) sites, 2) known State (WQARF) or Federal (CERCLA) superfund sites, and 3) known or suspected landfills, either historic or active (the location along the Salt River makes this a particularly important item to assess in the DEIS).</p> <p>The DEIS states: "The general and special conditions of the Section 404 Individual Permit would minimize impacts on jurisdictional waters to the extent practicable. ADEQ would issue Section 401 Individual certification for compliance with water quality prior to Section 404 permit issuance."</p> <p>The issuance of the Section 401 Individual certification in light of the impaired nature of the Salt and Gila River should have been discussed.</p>
SOCIOECONOMICS				
1	Context of the purpose and need	1-1, 1-5	Socioeconomics	<p>Purpose and Need (Chapter 1) states that demand for travel is based on capacity, transportation demand, and social and economic needs. Chapter 1 further states that MAG's regional travel demand model is used to forecast travel demand and that one of the inputs used includes socioeconomic data based on population and economic forecasts. Data used throughout the DEIS for projected population estimates are not consistent with Arizona Department of Administration estimates (see below). Population project estimates used throughout the DEIS are higher than the state range of estimates. Therefore, inputs into the travel demand model are likely skewing the model output, which is the foundation of two of the three elements of the project purpose and need.</p> <p>In the DEIS, projected growth estimates Maricopa County population to be 6.5 million by 2035 (citing MAG 2009b), however 2012 population projections estimated for Maricopa County by the Arizona Department of Administration (ADOA) estimate population in the county to be 5.2 million (low), 5.7 million (medium), or up to 6.2 million (high). http://www.maricopa.gov/population-projections.aspx</p> <p>Therefore the DEIS is using a population estimate for the County that is not consistent with the state's estimates. The DEIS estimates are 1.3 million to 300,000 more than state recognized projections. The ADOA estimates are intended "provide reliable unbiased projections of future population growth and a single state repository for current population references enabling sound planning and decision making by government and private entities."</p> <p>No indication is provided as to why a new system for projections is used and why it is so inconsistent with the ADOA estimates.</p> <p>DEIS states that 50% of the 6.5 million in population growth is expected to occur in areas that would be immediately served by the proposed action. This freeway is intended to be part of a regional transportation system intended to improve regional connectivity, regional capacity, etc. (see DEIS page 1-10). Therefore statement about service area is irrelevant to the purpose and need.</p>
1, 3, 4	Study Area		Socioeconomics	<p>Study Area is not well defined. Chapter 1 states that it is limited to southern Phoenix metropolitan area (page 1-1), while Chapter 3 further defines the study area in a figure caption (Figure 3-1). Chapter 3 defines the study area as the southwestern portion of Maricopa County, defined by a gap in the freeway network, limited by South Mountain and GRIC. No discussion is included of why there is a gap in the transportation network here, and why this is the only gap area. Why couldn't the study area and therefore alternatives include a connection south of the Gila River Indian Community (i.e., in Pinal County), or along Riggs Road or Queen Creek Road within the GRIC?</p> <p>This study area is further used in Chapter 4 when discussing social and economic conditions and impacts. As above, the South Mountain freeway is a regional freeway serving broader regional needs; therefore, for the purpose of the socioeconomic analysis, the study area is too restrictive. There is no reason the study area can't be different for socioeconomic than for other resources.</p>
4	Regional Demographic context	4-20	Socioeconomics	<p>Regarding population growth, see comment above. Projections are higher and potentially inflated with no explanation as to why a different source is used and why the estimates are different.</p>
4	Population and Employment	4-20	Socioeconomics	<p>It would be more appropriate to use a range of projection estimates as provided by ADOA. Using ADOA estimates for Maricopa County for 2035, population will increase 50-75% (not 85% between 2005 and 2035). Projections on the ADOA website are from 2012 while projections in the DEIS are from 2009 or earlier (MAG 2009b).</p>
4	Population and	4-20	Socioeconomics	<p>Per CEQ regulations, agencies are required to use the best available data in the analysis and in the decision making process. Data</p>

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Code	Issue	Response
268	Study Area	<p>The parameters for reference to the Study Area are defined in Chapter 1, <i>Purpose and Need</i>, of the Draft and Final Environmental Impact Statements as the area defining the transportation problem. As presented in the chapter, transportation models were used to determine where the characteristics of the transportation problem would diminish and generally, it is at these locations where the definition of the Study Area took shape. This effort was coordinated with stakeholder agencies, including the U.S. Environmental Protection Agency. The comment references the term, <i>Study Area</i>, in terms of the analytical requirements associated with impact analyses. Each element of the environment has independent, unique (while sometimes overlapping) geographic limits for impact analyses. These limits are established by technical expertise, knowledge, the application of recognized and accepted analytical methods and assumptions, and characteristics unique to the proposed action. Methodology reports were prepared for all elements and shared with agency peers and internal team members to validate methods and limits of study prior to conducting analyses, and results were validated by peers. During impact analyses, limits were adjusted, as appropriate, based on changes in project design as well as in-field observations. Impact analyses results were the subject of the application of scientific-community-recognized techniques with the appropriate amount of presentation in accordance with the efficiency and decision-making provisions of the National Environmental Policy Act.</p> <p>Chapter 2, <i>Gila River Indian Community Coordination</i>, of the Draft and Final Environmental Impact Statements text goes to great lengths to discuss limitations of study on Gila River Indian Community land. Chapter 3, <i>Alternatives</i>, of the Draft and Final Environmental Impact Statements provides substantial discussion on why alternatives on Riggs or Queen Creek roads were eliminated from further study. Any alternative on Gila River Indian Community land must consider tribal sovereignty. Tribal sovereignty is based in the inherent authority of Native American tribes to govern themselves. While this notion of sovereignty is manifested in many areas, generally Native American land is held in trust by the United States. Native American communities have the authority to regulate land uses and activities on their lands. States have very limited authority over activities within tribal land (see page 2-1 of the Final Environmental Impact Statement). From a practical standpoint, this means that the Arizona Department of Transportation and Federal Highway Administration do not have the authority to survey tribal land, make land use (including transportation) determinations directly affecting tribal land, or condemn tribal land for public benefit through an eminent domain process.</p>
269	Purpose and Need	<p>The analyses in the Draft Environmental Impact Statement used socioeconomic and traffic projections at the regional analysis zone and traffic analysis zone levels. At the time of publication of the Draft Environmental Impact Statement, Census 2010-based socioeconomic data at the regional analysis zone and traffic analysis zone levels had not been adopted by the Maricopa Association of Governments and were not available to the project team. Therefore, the data used in the Draft Environmental Impact Statement were the most appropriate information available. The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a</p>

(Response 269 continues on next page)

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270	4	Employment	4-21	Socioeconomics	throughout the section is out of date (see comments above). Last paragraph states growth in the region has essentially halted since the 2007 recession; however ADOA indicates some small growth every year (1.1-1.8%) between now and 2035. Statement in the DEIS about growth is not accurate.
271	4	Community Character/General	4-21	Socioeconomics	Pecos Road is a significant recreational bicycle route; no discussion is included about what construction of the highway would do to recreational use of this road.
272	4	Community Character/General	4-21	Socioeconomics	Social Conditions often include a discussion of recreation opportunities and changes to those in terms of community character, or sense of place. No discussion is included in the DEIS that addresses changes in recreation opportunities or changes to recreationist experiences; Section 4(f) impacts are discussed in Chapter 5 (trail, parkland, etc.) and impacts to these resources from a Section 4(f) perspective, but no discussion of the impacts from a social perspective is discussed. This should have been included in the social conditions or as a separate section of the DEIS.
273	4	Environmental Consequences (all alternatives)		Socioeconomics	Impacts discussion in Chapter 4 is limited to long-term impacts to arterials (reduction in traffic). Only a brief mention of the short-term impacts of construction is made at the end of Chapter 4, however this discussion should have been carried into the resource analysis to paint a complete picture. Construction will result in traffic delays, traffic re-routes (intentional and casual) noise, air emissions, etc. The statement is made (DEIS page 4-21) that there would be no adverse impacts to access to schools, however if construction impacts are considered (which they have to be), this statement is not true for short-term impacts. The statement is similarly not true for the long term. Under any of the action alternatives, the removal of the traffic interchange at 32 nd Street would, for example, significantly curtail access to at least four nearby schools: Kyrene de los Lagos Elementary School, Desert Vista High School, Kyrene Akimel A'al Middle School, and Kyrene de la Estrella Elementary School. The unit of analysis for the affected environment (census block-level, census block group) for Environmental Justice is appropriate. Affected Environment, Affected Populations identified the presence of minority and low-income populations throughout the study area. However, we disagree with the area of potential adverse environmental impacts being limited to the right-of-way footprint only. The ROW footprint for impacts is appropriate for displacements (direct impacts) only. Environmental justice populations can experience indirect adverse impacts such as adverse changes in air quality, noise levels, visual impacts, hazardous materials, property value, etc. Impacts to Environmental Justice populations are understated/underestimated in this DEIS as impact discussion is limited to direct impacts. Undue hardship is not defined when the analysis states "impacts would be temporary and would not cause undue hardship." The idea behind impacts being disproportionate, especially as it relates to low-income populations, is that they are often unable to relocate to avoid an adverse environmental impact—this is particularly true on tribal lands such as the GRIC, where individual residences may frequently be linked to a family's personal allotment of land. Therefore, although everyone in the ROW (including non-environmental justice populations) would be affected, if there are environmental justice populations—which the DEIS says there are—then the effects are disproportionate on those populations. It is difficult for the reader to fully assess environmental justice impacts because air and noise are not analyzed in terms of general attenuation distance. Similarly, for property value impacts, no discussion is included to understand if there would be property value changes, if they would be negative, generally how far out those impacts would be experienced, and if EJ populations would be impacted. Generally, there is no discussion of how far away from the freeway impacts would be experienced, and therefore no discussion of potential environmental-justice impacts from air and noise, property value, etc. Assessment of real estate values uses home values from 2006, 7 years ago. This data represents values prior to the 2007+ recession and is not the most recent, best available data. The housing market is quite different than it was in 2006; more recent data should have been employed in the analysis. There is no discussion of current housing inventory in the Study Area (not just the footprint/ROW), or of property values impacts at all, despite being a topic of concern over the long course of the project; property value as a public concern is expressed multiple times in Chapter 6 of the DEIS. ADOT's 2001 assessment of the impacts of freeways on property values from the expansion of the Superstition Freeway/US60 did find that there were economic benefits to property values from increased access and to multifamily residential, but that there were also
	4	Environmental Justice	4-30, 4-36	Socioeconomics	
	4	Environmental Justice	4-36	Socioeconomics	
	4	Displacements and Relocations	4-40	Socioeconomics	
	4	Economic Impacts	4-46+	Socioeconomics	

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269 (cont.)		lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future. The Maricopa Association of Governments' control total for Maricopa County is consistent with the "ADOA—Medium Series."
270	Purpose and Need	<p>The reference in the Draft Environmental Impact Statement was to the Study Area, not to Maricopa County or to the state of Arizona. Therefore, the Arizona Department of Administration numbers do not apply.</p> <p>The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future.</p>
271	Design	The main line of the E1 Alternative would not have a bicycle route as part of the design. Continuous east-west riding would be possible in the neighborhoods adjoining the alternative and along Chandler Boulevard.
272	Section 4(f) and Section 6(f)	<p>The proposed action would not have impacts on recreational opportunities or cause any changes to recreational experiences.</p> <p>With the exception of the Maricopa Trail, the affected trails are planned (future) facilities. Impacts on proposed trails are discussed in the Draft Environmental Impact Statement Section 4(f) section. Because the proposed action would be constructed as an elevated span that would clear the existing Maricopa Trail segment, no impact from a social perspective was determined to be likely.</p> <p>The social conditions section of the Draft Environmental Impact Statement addresses issues regarding community character and access; specific parkland impacts are addressed in the Draft Environmental Impact Statement Chapter 5, <i>Section 4(f) Evaluation</i>.</p>
273	Traffic	<p>The impacts noted in the comment are primarily temporary construction impacts. These are covered in the section, <i>Temporary Construction Impacts</i>, beginning on page 4-161 of the Draft Environmental Impact Statement.</p> <p>The determination to not include an interchange at 32nd Street was made in coordination with the City of Phoenix (see Figure 3-8 on page 3-15 of the Draft Environmental Impact Statement). The interchange was eliminated based on undesirable residential displacements, proximity to nearby schools, and cost.</p> <p>In 2006, the City of Phoenix conducted a traffic circulation study to evaluate the impacts of the proposed freeway on the local street system, including the shift of access to Foothills Reserve and Calabrea from Pecos Road to Chandler Boulevard. The City study found no adverse effects on the local street system from the freeway (see Appendix 3-1 in the Final Environmental Impact Statement).</p>

Code	Comment Document			
SWCA Comments on ADOT South Mountain Freeway Draft EIS (April 2013) Prepared for PARC et al.				
	Employment			throughout the section is out of date (see comments above).
4	Community Character	4-21	Socioeconomics	Last paragraph states growth in the region has essentially halted since the 2007 recession; however ADOA indicates some small growth every year (1.1-1.8%) between now and 2035. Statement in the DEIS about growth is not accurate.
4	Community Character/General	4-21	Socioeconomics	Pecos Road is a significant recreational bicycle route; no discussion is included about what construction of the highway would do to recreational use of this road.
4	Community Character/General	4-21	Socioeconomics	Social Conditions often include a discussion of recreation opportunities and changes to those in terms of community character, or sense of place. No discussion is included in the DEIS that addresses changes in recreation opportunities or changes to recreationist experiences; Section 4(f) impacts are discussed in Chapter 5 (trail, parkland, etc.) and impacts to these resources from a Section 4(f) perspective, but no discussion of the impacts from a social perspective is discussed. This should have been included in the social conditions or as a separate section of the DEIS.
4	Environmental Consequences (all alternatives)		Socioeconomics	Impacts discussion in Chapter 4 is limited to long-term impacts to arterials (reduction in traffic). Only a brief mention of the short-term impacts of construction is made at the end of Chapter 4, however this discussion should have been carried into the resource analysis to paint a complete picture. Construction will result in traffic delays, traffic re-routes (intentional and casual) noise, air emissions, etc. The statement is made (DEIS page 4-21) that there would be no adverse impacts to access to schools, however if construction impacts are considered (which they have to be), this statement is not true for short-term impacts. The statement is similarly not true for the long term. Under any of the action alternatives, the removal of the traffic interchange at 32 nd Street would, for example, significantly curtail access to at least four nearby schools: Kyrene de los Lagos Elementary School, Desert Vista High School, Kyrene Akimel A-ai Middle School, and Kyrene de la Estrella Elementary School.
4	Environmental Justice	4-30, 4-36	Socioeconomics	The unit of analysis for the affected environment (census block-level, census block group) for Environmental Justice is appropriate. Affected Environment. Affected Populations identified the presence of minority and low-income populations throughout the study area. However, we disagree with the area of potential adverse environmental impacts being limited to the right-of-way footprint only. The ROW footprint for impacts is appropriate for displacements (direct impacts) only. Environmental justice populations can experience indirect adverse impacts such as adverse changes in air quality, noise levels, visual impacts, hazardous materials, property value, etc. Impacts to Environmental Justice populations are understated/underestimated in this DEIS as impact discussion is limited to direct impacts. Undue hardship is not defined when the analysis states "impacts would be temporary and would not cause undue hardship." The idea behind impacts being disproportionate, especially as it relates to low-income populations, is that they are often unable to relocate to avoid an adverse environmental impact—this is particularly true on tribal lands such as the GRC, where individual residences may frequently be linked to a family's personal allotment of land. Therefore, although everyone in the ROW (including non-environmental justice populations) would be affected, if there are environmental justice populations—which the DEIS says there are—then the effects are disproportionate on those populations. It is difficult for the reader to fully assess environmental justice impacts because air and noise are not analyzed in terms of general attenuation distance. Similarly, for property value impacts, no discussion is included to understand if there would be property value changes, if they would be negative, generally how far out those impacts would be experienced, and if EJ populations would be impacted. Generally, there is no discussion of how far away from the freeway impacts would be experienced, and therefore no discussion of potential environmental-justice impacts from air and noise, property value, etc. Assessment of real estate values uses home values from 2006, 7 years ago. This data represents values prior to the 2007+ recession and is not the most recent, best available data. The housing market is quite different than it was in 2006; more recent data should have been employed in the analysis. There is no discussion of current housing inventory in the Study Area (not just the footprint/ROW), or of property values impacts at all, despite being a topic of concern over the long course of the project; property value as a public concern is expressed multiple times in Chapter 6 of the DEIS. ADOT's 2001 assessment of the impacts of freeways on property values from the expansion of the Superstition Freeway/US60 did find that there were economic benefits to property values from increased access and to multifamily residential, but that there were also
4	Environmental Justice	4-36	Socioeconomics	
4	Displacements and Relocations	4-40	Socioeconomics	
4	Economic Impacts	4-46+	Socioeconomics	

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Code	Issue	Response
274	Environmental Justice and Title VI	Impacts related to air quality, noise, visual resources, and hazardous materials are considered in the Draft Environmental Impact Statement for all populations, including environmental justice populations (see Draft Environmental Impact Statement page 4-58 [air quality], page 4-79 [noise], page 4-155 [visual resources], and page 4-152 [hazardous materials], respectively). The section entitled <i>Title VI and Environmental Justice</i> , beginning on page 4-29 in the Draft Environmental Impact Statement, presents acceptable methods, data, and assumptions to assess the potential for disproportionately high and adverse effects from the proposed action on environmental justice populations and disparate impacts to populations protected under Title VI. Based upon the content of the section, no such effects would result from the action alternatives. In light of comments received on the Draft Environmental Impact Statement, the above-referenced conclusions were confirmed in the preparation of the Final Environmental Impact Statement. To provide further clarity, the discussions of environmental justice and Title VI were separated and additional text explaining the relationship of environmental justice and Title VI to various environmental elements was added throughout Chapter 4, <i>Affected Environment, Environmental Consequences, and Mitigation</i> , as exemplified by the inserted text on page 4-29 of the Final Environmental Impact Statement. Land acquisition and relocation assistance services for the project shall be available to all individuals without discrimination in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (Uniform Act). The Uniform Act provides uniform, fair, and equitable treatment of people whose property is impacted or who are displaced as a result of the project, including those with special needs. Advisory assistance services and compensation practices are described in detail in the Arizona Department of Transportation's <i>Right-of-way Procedures Manual</i> , located at <azdot.gov/business/RightofWay_Properties/booklets-and-manuals>. For further discussion, see page 4-51 of the Final Environmental Impact Statement and Appendix 4-1. There would be no direct impacts on Gila River Indian Community land, nor would there be any adverse impacts that would require relocations from the Gila River Indian Community or allotment land.
275	Neighborhoods/ Communities	A review of the literature reveals few detailed and comprehensive analyses of the relationship between the transportation infrastructure and residential property values (Transportation Research Record: Journal of the Transportation Research Board, No. 2174, Transportation Research Board of the National Academies, Washington, D.C., 2010, pages 138–47; “Impact of Highways on Property Values: Case Study of the Superstition Freeway Corridor”). A recent study by the California Department of Transportation concluded that freeway facilities did not substantially affect sales prices in residential areas adjacent to the facility. The study concluded that it is the visibility of the freeway that may influence selling price and not distance or noise. As a result, the researchers generally concluded that the more the visibility of a new freeway is reduced, the less it would determine the sales price of homes sold in the area.
276	Neighborhoods/ Communities	The availability and valuation assessment of residential properties has been updated in the Final Environmental Impact Statement (see page 4-47).

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Comment Document

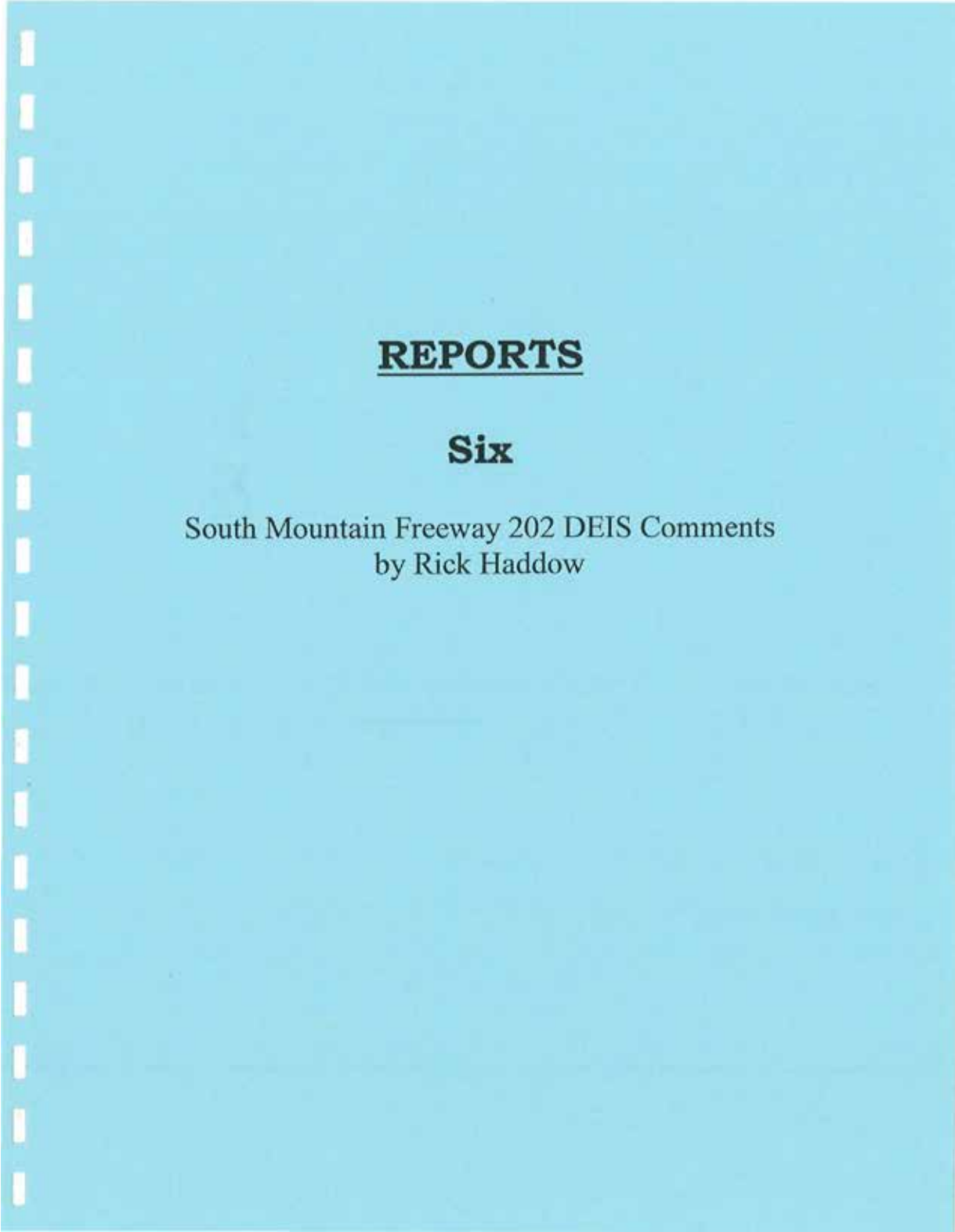
SWCA Comments on ADOT South Mountain Freeway Draft EIS (April 2013) Prepared for PARC et al.

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				negative impacts to property values on single-family residential housing (ADOT 2001). Impacts were based on distance to the freeway as well as a variety of other factors. The DEIS should have included a discussion of property values, both current in the study area (not just the right-of-way) as well as differentiating between impacts during construction and during operation.
4	Economic Impacts	4-46+	Socioeconomics	Property tax discussion is limited to direct loss of revenue through direct loss of properties (displaced, only in the ROW). No assessment is included of potential reductions in property tax revenue from changes in home prices in the study area if the project is constructed.

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277	Neighborhoods/Communities	A review of the literature reveals few detailed and comprehensive analyses of the relationship between the transportation infrastructure and residential property values (Transportation Research Record: Journal of the Transportation Research Board, No. 2174, Transportation Research Board of the National Academies, Washington, D.C., 2010, pages 138–47; “Impact of Highways on Property Values: Case Study of the Superstition Freeway Corridor”). A recent study by the California Department of Transportation concluded that freeway facilities did not substantially affect sales prices in residential areas adjacent to the facility. The study concluded that it is the visibility of the freeway that may influence selling price and not distance or noise. As a result, the researchers generally concluded that the more the visibility of a new freeway is reduced, the less it would determine the sales price of homes sold in the area.

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	 The image shows the front cover of a report. The cover is light blue with a white dashed line along the left edge, suggesting it was part of a binder. The title 'REPORTS' is centered in a bold, black, sans-serif font and is underlined. Below it, the word 'Six' is also centered in a bold, black, sans-serif font. At the bottom, the text 'South Mountain Freeway 202 DEIS Comments' is centered in a smaller, black, sans-serif font, followed by 'by Rick Haddow' in an even smaller font.

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	<p>South Mountain Freeway 202 DEIS Comments Prepared for PARC et al. By: Rick Haddow</p> <p>From approximately 2006 through 2012, I worked for the Arizona Department of Transportation (“ADOT”) as a District Environmental Coordinator. As a District Environmental Coordinator for ADOT, I was responsible for, in part, overseeing environmental planning and compliance with regard to ADOT construction projects and related public outreach. Prior to working with ADOT, I was with the Maricopa County Health Department, Division of Environmental Services for approximately 18 years. While with the County I, in part, designed and implemented the ambient air monitoring system network to determine attainment status for criteria pollutants throughout the County – including the area impacted by the proposed South Mountain/Loop 202 Freeway. I have also worked, and continue to work, as an environmental consultant. As set forth in my CV, which is attached hereto, I have significant experience in assessing environmental impacts and the mitigation thereof, as well as in air and water monitoring, modeling, and permitting.</p> <p>278 I recently reviewed the ADOT Draft Environmental Impact Statement for the South Mountain/ Loop 202 Freeway (“DEIS”) and was shocked at what was presented. The DEIS is mostly standard boiler plate information as copied from regulatory documents. The use of data, the methodology employed, and the conclusions presented in the DEIS are absolutely without technical merit and do not comply with the fundamental concepts and purpose of an environmental impact statement. The DEIS does not protect or properly inform the citizens of the level of risk to public health by building the freeway. Following are some of my comments based on my thirty years of experience in the environmental field.</p> <p>279 The DEIS utilizes faulty wind speed data and methodology in doing its modeling. Wind speed is an essential part of the air shed modeling that ADOT used to determine, in part, regional stability – which relates to inversion layers and local weather patterns vis-à-vis projected freeway pollution. For example, the DEIS inputs are based on times that are not concurrent with pollution building hours. The DEIS also fails to correlate the morning traffic hours 0500 to 1100 during the build up of tail pipe emissions during an air shed inversion. The ability to determine CO and Particulate concentrations needs accurate wind data measurements during periods expected to have high pollutant concentrations.</p> <p>280 The South Mountain Transportation Corridor Study (“SMTC”) – a scoping document/component of the DEIS – confirms that South Mountain greatly influences the local air shed movement. According to the SMTC, down slopes bring cooler air in the evenings. The SMTC and the DEIS, however, fail to indicate that this process intensifies the morning desert inversion, exacerbating pollutant concentrations. Air quality will worsen by the influence of the mountain and any build option. The mountain creates its own small air shed, which is not evaluated by the DEIS. All reporting data uses valley wide components for stated results.</p>
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278	Environmental Impact Statement Process	<p>The study used state-of-the-practice, scientific community methods and similarly accepted methods. Methods, assumptions, and data were developed early in the environmental impact statement process and peer reviewed by the Federal Highway Administration, the Arizona Department of Transportation, and other federal, State, and local agencies. Peer reviewers concluded that the methods, assumptions, and data are appropriate. The Draft Environmental Impact Statement has sufficient technical merit, does comply with “fundamental concepts and purpose of an environmental impact statement,” and does appropriately and properly inform the public.</p> <p>The Arizona Department of Transportation and Federal Highway Administration, in cooperation with the U.S. Army Corps of Engineers, the U.S. Bureau of Indian Affairs, and the Western Area Power Administration, prepared the Draft and Final Environmental Impact Statements and Section 4(f) Evaluation in accordance with the National Environmental Policy Act of 1969 [42 United States Code § 4332(2) (c)], Section 4(f) of the U.S. Department of Transportation Act of 1966 (49 United States Code § 303, as amended), and Section 404 of the Clean Water Act of 1977 (33 United States Code § 1251). All of these agencies are experienced in the review of National Environmental Policy Act documents and have found the logical sequence of decision making to be sound and in line with National Environmental Policy Act requirements. The Draft Environmental Impact Statement and Section 4(f) Evaluation 1) satisfies Federal Highway Administration and Arizona Department of Transportation's environmental analysis requirements; 2) provides a comparison of the social, economic, and environmental impacts that may result from implementation of the proposed action—construction and operation of a major transportation facility; and 3) identifies measures to avoid, reduce, or otherwise mitigate adverse impacts.</p>
279	Air Quality	<p>The air quality assessment for the proposed freeway analyzed impacts from carbon monoxide and particulate matter (PM₁₀) and followed U.S. Environmental Protection Agency guidelines. The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones. For mobile source air toxics, the analysis showed that for the Study Area, constructing the freeway would have a marginal effect on annual emissions in 2025 and 2035 (less than a 1 percent difference in total annual emissions between the Preferred Alternative and No-Action Alternative). With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions. The air quality analyses were updated for the Final Environmental Impact Statement, including a quantitative particulate matter (PM₁₀) analysis, and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement. Modeling methodology and results were reviewed by the Federal Highway Administration, Arizona Department of Transportation, and Maricopa Association of Governments.</p>
(Response 279 continues on next page)		

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281	<p>The sampling and stability data relied on by the SMTC and the DEIS is inaccurate. ADOT relies on air data taken at the Phoenix airport in the middle of the Valley without terrain conditions that proximate the region impacted by the South Mountain Freeway. Even based on the airport data, however, ADOT finds E and F stability 57% of the time. That is, according to ADOT “air shed mixing poorest diffusion condition.” The actual 202 stability would be much worse, compounding Phoenix airport conditions by stronger temperature inversions because of the mountain’s location and size. More pollutants from the freeway next to the ground will be trapped more quickly with significantly higher expected pollutant concentrations in the Ahwatukee community.</p> <p>ADOT DEIS did not use MCAQD DELTA Temperature instruments for calculating inversion conditions to determine accurate pollutant concentration projections. ADOT DEIS technical documents clearly show that Maricopa County Air Quality delta T systems data was not used for actual ground level measurements of temperature inversions. Without this data of actual inversion strength, which shows how quickly pollutant concentrations will increase, any modeling cannot accurately reflect the population exposure to those pollutants. Stability and Air Quality modeling conducted by ADOT as set forth in the DEIS provides no useful data and must not be used to determine potential air pollution concentrations of the South Mountain 202 freeway.</p> <p>ADOT used Aircraft Communications Addressing and Reporting System (ACARS) for vertical temperatures and wind profiles. This method does not correlate to ground level inversion strength for population exposure and is not a scientific method or remotely reasonable to conclude accurate results. Data used does not have any quality assurance or quality control measurements. This means the equipment used does not have proven repeatability to produce the same temperature or wind speed for any given measurement. Moreover, no standard heights were used for correlating air shed temperatures. For example, one data point is measured at 2000 feet the next is at 3000 feet separated by miles and not at the same time of day. These random numbers were used by ADOT in a model without identifying the program.</p> <p>Any results derived from the ACARS data are incomplete, not relevant, and mislead the community with technical jargon trying to show justification of expected air quality concentrations for each build and no build situation. Not only is the data not taken from the freeway project area, the data is randomly gathered at different heights, locations, and times. If a temperature sensor or wind speed and direction system cannot produce the same temperature/direction/speed each time for the same given test, the data is not valid and must not be used for modeling. As indicated previously, the data used in the DEIS is not valid without any quality assurance and quality control data to support measurements.</p> <p>ADOT incorrectly uses ambient delta temperatures for determining air quality inversions. Page 18 of the DEIS Technical Report of the air quality section shows ambient delta temperature differences between air quality monitoring stations separated by many miles and different elevations. This spatial distance is not how to determine inversion strength. The DEIS report author produces figures, graphs and explanation of their findings of inversions found and expected in the future. This clearly shows that ADOT does not</p>
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279 (cont.)		<p>The U.S. Environmental Protection Agency-recommended wind speed of 1 meter per second was used in the modeling.</p> <p>Traffic volumes during the evening peak hour were used in the modeling to represent worst-case conditions. During the time that Maricopa County was in nonattainment for carbon monoxide, it was as a result of exceedances of the 8-hour standard associated with evening traffic.</p>
280	Air Quality	<p>The South Mountains may redirect airflow, but they do not stop airflow.</p>
281	Air Quality	<p>At the request of (then) Arizona State Senator John Huppenthal, short-term monitoring of meteorological conditions at Pecos Road and 24th and 40th streets was conducted during 2006 and 2007. Results of this sampling and data from various Maricopa County Air Quality Department monitoring sites were included in the technical report for informational purposes only.</p>

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	<p>understand air quality modeling and misrepresents the danger to the citizens from Loop 202 Freeway pollution.</p>
281	<p>Delta temperature is used vertically with two temperature sensors comparing the difference of temperature between them. Standard Delta temperature systems used for air quality modeling and forecasting daily air quality by County and State officials has one temperature sensor at three meters and the other at ten meters, directly above each other. An inversion is when the air at the lower sensor is cooler than the upper sensor regardless of the ambient temperature. Inversion strength is only a few degrees, with five degrees being a very strong inversion. The facts, figures, and explanation of the DEIS technical documents using delta temperature clearly show the report has no merit. Those in the atmospheric measurement business understand that the DEIS author does not understand the meaning of delta temperature, how it is obtained, used or its ability for meaningful input into air quality models. An example of this lack of understanding can be found on page 29 of the ADOT Technical Report, Air Quality section, which states that, “[t]he difference in the hourly temperatures at the two locations were again plotted to provide an indication of the atmosphere’s stability; the results are represented in figure 15. Positive numbers indicate that the temperatures at SMPP were warmer than at Pecos road location and represent inversion conditions during that hour.” Inversion measurements to determine pollution concentrations are never conducted as ADOT purports. What is worse is that those measurements made it into their air quality prediction models, falsely reporting results to the public as good science.</p> <p>Notwithstanding that this NEPA process has taken over 12 years, ADOT has not conducted any studies on atmospheric and/or ambient quality/conditions in the Ahwatukee area. As a result, there is no valid baseline data to input into air quality models that predict how bad the pollution in the area will be. Sites listed for reference to determine air quality for the citizens are nowhere near the impacted area and should not be used to determine air quality north of the Pecos Road alignment. Similarly, there are no temperature soundings for accurate air shed profiling. There are no air toxics measurements taken to understand the current components of the ambient air quality, and there are no wind speed and direction instruments installed as necessary to apply good science for modeling. These wind speed and direction monitors should have been installed north of the Pecos Road alignment east and west throughout the Ahwatukee community and near South Mountain to show how the Ahwatukee air shed does not remove tail pipe emissions from the freeway, but actually washes pollutants to the west in the mornings, shifting north near noon, with winds lastly northeasterly. This normal wintertime pattern known to all Arizona air quality technical persons is not shown or reflected in the ADOT DEIS.</p> <p>In my opinion, wintertime inversions with multiple days of air stagnation will cause exceedances of the ambient air quality standards for the criteria pollutants for any build option inside the Ahwatukee area.</p> <p>My independent research and data review of other local air quality databases with more accurate and relevant measurements (i.e. hourly wind speed and direction, actual</p>
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282	Air Quality	The Aircraft Communications Addressing and Reporting System data were not used for modeling; they were included for informational purposes only.
283	Air Quality	Phoenix is in nonattainment for particulate matter (PM ₁₀) and ozone. Exceedances of ozone attributable to the proposed freeway are unlikely, and the analysis of particulate matter (PM ₁₀) impacts also suggests the same for particulate matter (PM ₁₀). See page 4-76 of the Final Environmental Impact Statement for the results of the particulate matter (PM ₁₀) analysis.
284	Air Quality	<p>Identification of data sources used in the comment would have been helpful. The comment would need to provide citations and references for the information provided for further comment response. The air quality assessment for impacts from carbon monoxide followed the U.S. Environmental Protection Agency guidelines in <i>Guideline for Modeling Carbon Monoxide from Roadway Intersections</i> (A-OAQPS, 1992). Inputs to the model were based on U.S. Environmental Protection Agency-recommended values or were selected to provide a conservative estimate of impacts. Modeling methodology and results were reviewed by the Federal Highway Administration, Arizona Department of Transportation, and Maricopa Association of Governments.</p> <p>Although the qualitative particulate matter (PM₁₀) hot-spot analysis performed in the Draft Environmental Impact Statement met 40 Code of Federal Regulations § 93.111(c), the Arizona Department of Transportation and Federal Highway Administration have updated the qualitative analysis to a particulate matter (PM₁₀) quantitative analysis for the Final Environmental Impact Statement to ensure that a state-of-the-art analysis is completed for the proposed action. The quantitative project-level particulate matter (PM₁₀) hot-spot analysis prepared for the proposed project is summarized in the prologue to the Final Environmental Impact Statement (page xiii) and is more fully described beginning on page 4-68 of the Final Environmental Impact Statement. The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones. A particulate matter (PM_{2.5}) analysis is not required since the area is in attainment for the particulate matter (PM_{2.5}) National Ambient Air Quality Standard.</p>

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	<p>inversion strength and air stagnation durations, and many other components of air modeling) shows that the Ahwatukee/Foothills area north of the proposed freeway alignment will exceed both particulate matter (PM) and Carbon Monoxide (CO) standards within 100 meters (micro scale siting) from the edge of roadway of the South Mountain Freeway during adverse weather and meteorological conditions. Valley-wide pollutant concentrations will be high, and any build option will compound and intensify trapped pollution between the freeway and the mountain.</p>
284	<p>Ahwatukee residents 100 to 500 meters (middle scale siting) away from the freeway alignment will most likely experience unhealthy exposures near or at the air quality standards for particulate matter (PM). Diesel Particulate Matter, the fine PM 2.5 µm will be carried further into the community and based on the DEIS list of the components of diesel particulate matter, will present serious health concerns.</p>
285	<p>The data used to support the DEIS does not have quality assurance or quality control and is not valid. All air quality data used must meet quality assurance measurements of precision and accuracy to be valid. Quality control measurements using different testing systems than quality assurance must meet standards (test concentrations). Incorrectly applying slope and intercept calculations to data can potentially reduce air quality measurements into database. Improper testing of air quality instruments will invalidate data. Not meeting the testing frequency requirements for either QA or QC will invalidate data.</p> <p>Particulate and gaseous samplers and meteorological systems require routine maintenance, failure to maintain equipment as required will invalidate collected air quality data. The DEIS does not ensure data measurements used are valid, traceability of measurement protocols are missing and should make all reports suspect of erroneous results.</p>
286	<p>Page 67 of the technical report on the air quality section states that “the selection of each of the metrological conditions was based on EPA-454-/R 92-005, guidelines for modeling carbon monoxide from roadway intersections.” This is not how you would determine the air quality impact of an eight lane freeway. It appears that the DEIS was completed by contractors without experience in the industry and randomly attached meaningless data, facts and figures that do not support the stated ADOT conclusions. ADOT review of submitted air quality technical data and conclusions are without merit, proper review of methodology and applied science. This report provides no real analysis of the stated purpose of the DEIS.</p>
287	<p>The DEIS component addressing the US Army Corps of Engineers section 404 of the clean water act, and the 401 certification by ADEQ is in jeopardy. EPA has found that ADOT has routinely failed to comply with contracts with FHWA, USACOE, ADEQ and USFS to maintain, limit or control sediment discharges into jurisdictional waters of the US. The Gila and Salt rivers are waters of the US inside this planned project. EPA actions have created an environmental program inside of ADOT. This environmental program has failed to implement the most basic construction mitigations. Statewide highway</p>

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285	Air Quality	Ambient levels of the criteria pollutants reported were obtained from the Maricopa County Air Quality Department, which follows U.S. Environmental Protection Agency quality assurance/quality control procedures.
286	Air Quality	The air quality assessment for impacts from carbon monoxide followed the U.S. Environmental Protection Agency guidelines in Guideline for Modeling Carbon Monoxide from Roadway Intersections (A-OAQPS, 1992). This is accepted methodology. See <epa.gov/ttn/scram/dispersion_prefrec.htm#cal3qhc>.
287	Water Resources, Waters of the United States	Controlling and treating runoff is a normal function of the Arizona Department of Transportation projects. No evidence is offered to substantiate such statements. The U.S. Army Corps of Engineers, as a cooperating agency, has participated and contributed in each step of the environmental process. The agency has found the logical sequence of decision making to be sound and in line with National Environmental Policy Act requirements. The Arizona Department of Environmental Quality has also contributed to the process. Both agencies as referenced in the comment have oversight roles in project permitting as established in the Clean Water Act (Sections 401, 402, and 404). Extensive mitigation in accordance with the permitting requirements can be found in the <i>Water Resources</i> and <i>Waters of the United States</i> sections of Chapter 4 of the Final Environmental Impact Statement. The Arizona Department of Transportation is fully obligated and committed to implementation and adherence to those mitigation strategies.

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	<p>construction along hillsides have created large and numerous rills (deep cuts down hillsides). These rills, wash sediment into our waterways, polluting the ecosystem. ADOT management down plays environmental stewardship, by stating “we have always done it this way”. ADEQ, Army Corps and FHWA do not conduct any inspections. Internal ADOT environmental staff does not influence ADOT management; ADOT management is self environmental regulating without fear of ADEQ, FHWA or other construction partners. FHWA does not provide funding for continued maintenance of hillside erosion after construction. Statewide ADOT does not provide its maintenance highway workers funding to mitigate sediment discharges from hillside rills and failed sediment control features of the original construction best management practices. ADOT has failed to protect the environment in nearly all completed construction sites with the same terrain of the South Mountain 202. It is expected that ADOT will not honor their own Statewide Individual Stormwater permit, allowing sediment discharges during and after construction of the freeway.</p>
288	<p>Tail pipe emissions and other transportation discharges including: material lost from untarpped or improperly tarpped trucks, fluids/chemicals leaking from container vehicles can dry and become reintrained into the atmosphere potentially harming residents closest to freeway.</p> <p>Tribal lands do contribute to the local air shed loading of particulate matter. The entire area south of the planned freeway is unstable land used and never maintained for dust control. No enforcement ability by Federal, State or County for the impact to the Ahwatukee residents, this additional particulate will be in addition to particulate generated by vehicle emissions.</p>
289	<p>PM10 blown onto the freeway from the Tribal lands to the south will be reintrained into the atmosphere, allowing PM10 normally not reaching the Ahwatukee areas to be re broadcasted into the air and carried into the neighborhood.</p> <p>A hazardous materials accident would trap the community or create panic to shelter in place with gaseous plume and fire exposure. Most winds will carry hazardous materials and smoke into the area north of the freeway. Potentially trapping people between the plume and their ability to exit safety without traveling through the plume of toxic gases.</p>
290	<p>Visibility will be significantly reduced for all residents looking south, southeast and southwest. Observations of local freeways from local area hill tops inside metro Phoenix clearly shows the dark particulate/tail pipe emissions above valley freeways. This planned freeway will be no different. Heavy particulate and tailpipe emissions will obscure current scenic views.</p>
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288	Air Quality	Paved road dust was considered in the quantitative, project-level, particulate matter (PM ₁₀) hot-spot analysis prepared for the proposed project. The results of the analysis are summarized in the prologue to the Final Environmental Impact Statement (page xiii) and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement. The carbon monoxide and particulate matter (PM ₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones.
289	Air Quality	<p>According to the 2013 Arizona Department of Transportation <i>Air Quality Assessment South Mountain Freeway 202L Draft Report</i>, review of wind data from the Gila River Indian Community monitoring site at St. Johns suggests that during the morning hours and associated with mountain-drainage air flows and stable atmospheric conditions, wind flows are from the southeast and follow the Gila River channel to the north. Locations to the east of St. Johns experience flow from the east to the lower elevations along the Gila River. During the warmer hours’ improved mixing, flows typically follow the river channel and come from the north and northwest.</p> <p>Likewise, during a 1-month-long meteorological monitoring period (November 20, 2006, through December 21, 2006) at Pecos Road and 40th Street and a second 1-month-long monitoring period at Pecos Road and 24th and 40th streets (April 19, 2007, through May 21, 2007), winds during the morning hours typically were from the northeast. During the warmer hours, and with improved mixing, winds typically were from the west.</p>
290	Air Quality	Impacts on visibility are primarily related to extremely small aerosols from multiple sources. As noted in the text box on page 4-69 of the Final Environmental Impact Statement, in the Phoenix metropolitan area, about 34 percent of particulate (PM _{2.5}) emissions are attributed to on-road mobile sources, which contributes to the brown cloud and visibility issues; however, reductions in on-road mobile source emissions through emission controls have produced visibility improvements. The Arizona Department of Environmental Quality monitors visibility in the Phoenix metropolitan area.

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291	<p>Curriculum Vitae</p> <p>Richard B. Haddow 6303 E. Windsong St. Apache Junction, AZ 85119 602-980-5034 Email RHaddowPI@earthlink.net</p> <p>2006 to January 2012 Arizona Department of Transportation: Globe District Environmental Coordinator</p> <p>2003 to Present Haddow Environmental Research Organization: Air Quality Expert Witness, EPA Qualified Researcher, AZ State Licensed Investigator, qualifying party.</p> <p>1985 to 2003 Maricopa County Health Department / Environmental Services: Quality Assurance Manager, Public Health Engineer, Environmental Health Supervisor, Open Burning/Asbestos Manager, Environmental Investigator Supervisor</p> <p>Knowledge Skills and Abilities (KSA) Technical Represent the ADOT Globe District Engineer for all environmental programs while providing technical assistance and expertise to local governments. Represented Maricopa County Environmental Services to the MAG Committee, Air Quality Technical Advisory Committee. Conducted statistical analysis with air quality modeling, meteorological modeling and travel demand modeling to determine air quality equipment siting criteria to meet Maricopa County EPA grant objectives. Managed and maintained multiple complex databases for air quality modeling. Conducted research studies using demographic and land use data to address the impacts of alternative highway designs. Conducted stakeholder groups and community workshops on environmental rule making. Forecasted carbon monoxide, particulate and ozone advisories to the public and media. Worked with and for attorneys to collect information and provide testimony as an expert witness. Provided testimony in support of industrial clients against claims that they were in violation of environmental laws. Testified as an expert witness for the Attorney General's Office for Superfund Investigations. Areas of expert subject matter include: air quality modeling, law enforcement, air pollution chemistry, air monitoring instrumentation and siting, analytical chemistry, air toxics, meteorological monitoring and forecasting, environmental compliance, regulatory analyses, audits, permitting, emissions inventories, environmental data analysis, quality assurance, quality control, soil and water sampling, technical report writing, data acquisition instrumentation calibrations (as well as repair and maintenance), standards testing and traceability. Conducted environmental investigations. Earned more than ten semi-annual certifications as an ADEQ visible emissions evaluator EPA Method 9. Performed technical review of air, soil, water and meteorological data, performance and system auditing, database management, air monitoring and site assessment and selection. Adhered to the Code of Federal Regulations for NAAQS (National Ambient Air Quality Standards). Experienced in the arenas of water programs, data validation, air pollution training, air pollution prevention, hazardous air pollutants, water supply field inspection, hazardous materials and waste management.</p>

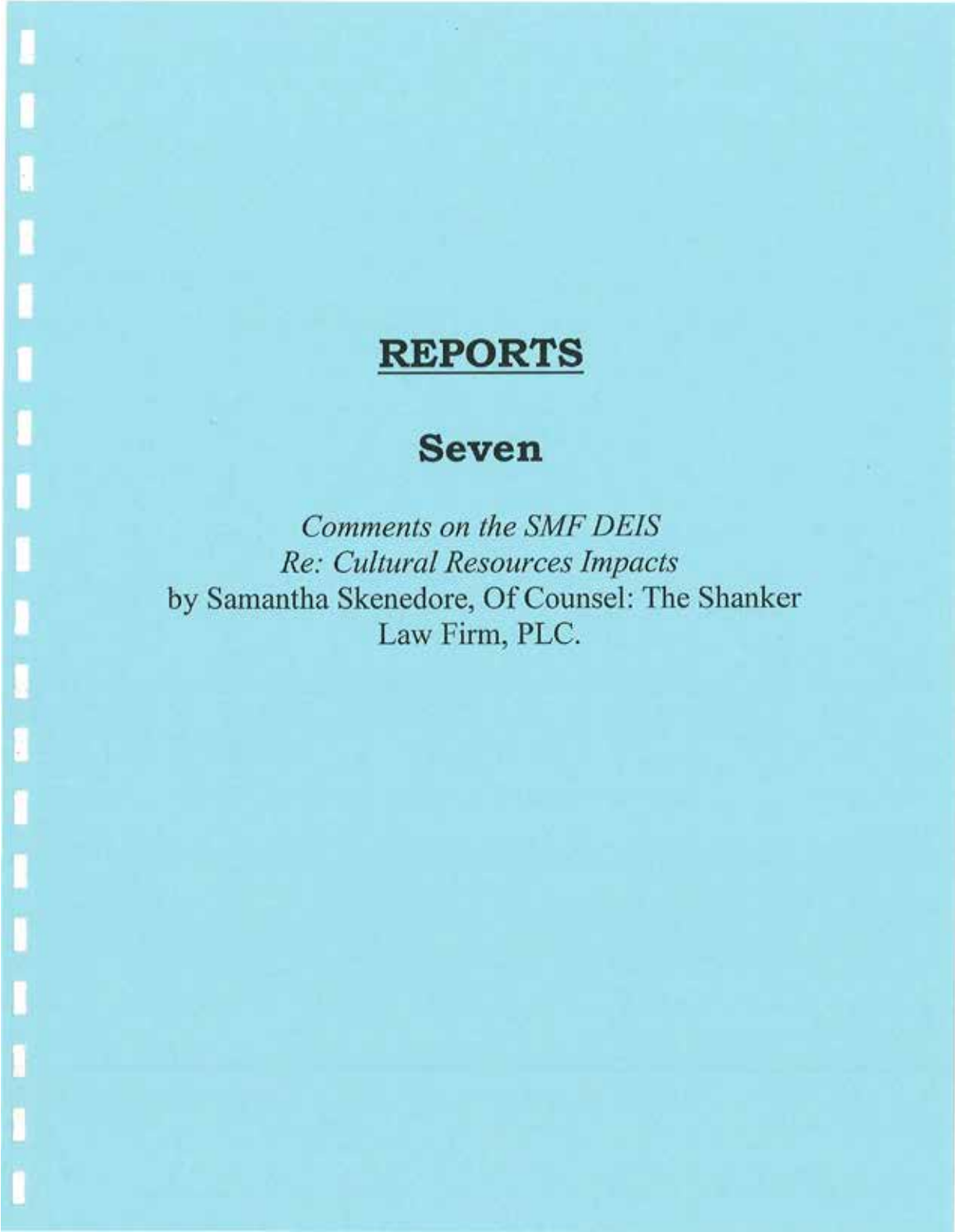
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291		Résumé

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	<p>Evaluated permit applications to determine the potential impact to communities surrounding industrial facilities in the event of a release (Off Site Consequence Analysis). Prepared complex reports, findings and conclusions and presented to executive management.</p> <p>Conducted stakeholder group meetings and community workshops to explain complex environmental programs. Worked with neighbors to resolve complex issues that had potential to directly impact their quality of life.</p> <p><u>Knowledge Skills and Abilities (KSA)</u> <u>Professional Experience</u></p> <p>Represent the ADOT Globe District Engineer for COGs, MPOs and tribal transportation groups. Maricopa County Environmental Services: Worked with groups by means of committee/task force to resolve complex rule making and air quality planning by applying political consensus. Wrote, operated and managed Federal grants with signature authority, as well as multiple ongoing complex programs. Designed, built and maintained an ambient air monitoring program with use of ISTEA funds (\$1.2M) to ensure future state transportation monies. Preparation and dissemination of complex models, findings, and conclusions to executive management. Conducted environmental seminars and training programs that simplified the understanding of a highly technical analysis.</p> <p>Evaluated permit applications for process engineering such as Title V permits and Non Title V permits, including mobile sources. Held regulatory authority over permit holders to ensure compliance within the sand and gravel industry as well as mining and earthmoving operations. Managed multiple ongoing environmental programs. Applied AP-42 emission factors as related to hot asphalt mixing facilities, Portland cement plants, and sand and gravel processing. Reviewed and commented on air quality permit applications to Arizona Department of Environmental Quality (ADEQ) and non-attainment counties. Wrote, implemented and maintained dust control programs. Managed and trained air quality permit investigators. Conducted environmental seminars and training programs for regulated industry groups and regulators. Conducted and managed storm water pollution prevention planning programs (SWPPP).</p> <p>Operated and managed an ambient air monitoring program in accordance with the USEPA objectives for criteria pollutants: Particulates (PM-10µm & 2.5µm), carbon monoxide, ozone, sulfur dioxide, nitrogen dioxide and lead. Monitored air toxics, hazardous air pollutants, and visibility including enhanced ozone monitoring (PSD). Conducted technical research for the assessment of air quality (modeling). Performed analysis of statistical data to evaluate attainment status of pollutants. Operated and managed the quality assurance program to ensure data met or exceeded ambient air monitoring protocols, methods and traceability of standards. Managed federal and state performance audits. Performed field environmental monitoring and investigations for special studies. Managed a team of air quality assurance technicians, chemists, and electronic technicians. Managed the chemistry laboratory operations. Designed, installed, managed and maintained the network for ambient air monitoring stations in Maricopa County, Arizona. Conducted joint special studies for ozone, particulates, carbon monoxide and visibility with USEPA, ADEQ, and the USDA Forest Service. Managed the database for ambient air quality and quality assurance in the USEPA AIRS database. Designed and managed the gaseous and particulate standards program for QA/QC. Author of the first approved by USEPA for Quality Assurance and Operating Procedures Manual for Field and Office Activities of Maricopa County, Arizona.</p>
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	<p>Worked closely with Federal Highway Administration (NEPA), US Army Corps of Engineers 404 Permits, US Fish and Wildlife, Arizona Department of Game and Fish, Arizona Historical Preservation Office, Bureau of Land Management (Arizona) and ADEQ 401 water quality cert., ADOT Individual (MS4) permit to ensure compliance of mitigation measures statewide.</p> <p><u>Education</u> Quality assurance ambient air monitoring, CARB Sacramento, Ca 1985 Bachelor of Science, AZ State Univ., MBA course completed 1993. Environmental Investigations, Western States Projects 1994. Regulatory Framework for Toxic and Hazardous Substances, Department of Manufacturing and Industrial Technology, Arizona State University, College of Engineering and Applied Sciences 1995.</p> <p><u>Military Service</u> US Navy, Advanced Electronics, Qualified in Nuclear Submarines 1978-1984, Honorable Discharge</p> <p><u>Licenses and Certifications</u> State of Arizona Private Investigation Business License # 1003813 Qualified US Environmental Protection Agency Researcher Erosion Control Coordinator, Arizona General Contractors Association Chemical-terrorism Vulnerability Information User - Certificate</p> <p><u>Community Services</u> Pinal County Sheriff's Office Criminal Investigation Bureau Volunteer/Crime Victim Advocate Chair, Pinal County Local Emergency Planning Committee (PC LEPC)</p>

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	<div>COMMENTS ON THE SOUTH MOUNTAIN FREEWAY DRAFT ENVIRONMENTAL IMPACT STATEMENT ISSUED APRIL 2013 REGARDING IMPACTS TO CULTURAL RESOURCES July 22, 2013 <i>Prepared by Samantha C. Skenandore Of-Counsel, The Shanker Law Firm, PLLC</i></div> <div>292</div> <div>The Federal Highways Administration (the “FHWA”) and the Arizona Department of Transportation (“ADOT”) prepared and issued a Draft Environmental Impact Statement and Section 4(f) Evaluation (the “DEIS”) of the Freeway project pursuant to 42 U.S.C. §4332(2)(c), 49 U.S.C. §303 and 33 U.S.C. §1251 in April 2013. The DEIS particularly addresses the preferred alternative (the “E1 Alternative”) for building a major highway known as the South Mountain Loop which will destroy and desecrate a mountain range held sacred by Native Americans from various tribes.¹ The FHWA and ADOT issued the DEIS and selected the E1 Alternative despite the fact that the E1 Alternative will (1) cause irreversible damage to the sacred and historically significant South Mountain,² and (2) have a profound negative impact on the religious, cultural and spiritual well-being of Native Americans. Portions of South Mountain lie within the exterior boundaries of a federally-recognized tribe – the Gila River Indian Community (the “GRIC”).³ The GRIC and other tribes have attached a significant traditional, cultural and religious value upon South Mountain and adjacent areas.</div> <div>293</div> <div>The FHWA and the ADOT failed to adequately consult with the tribes. This failure is carried over into the DEIS which, as a result, draws flawed conclusions. The FHWA and ADOT should re-initiate the Section 106 process with reasonable and good faith efforts to consult all tribes and amend any and all technical studies identifying, assessing, evaluating and mitigating adverse impacts to cultural resources with tribal input.</div> <div>294</div> <div>In addition, the FHWA and ADOT should seek a review by the National Advisory Council on Historic Preservation to conduct a case analysis of the Section 106 deficiencies and strictly adhere to the Council’s recommendations for corrective actions. <i>See</i> 36 C.F.R. §800.9. The aforementioned recommendations are based on the following: <div>I. The FHWA and ADOT is non-compliant with Section 106 (“Section 106”) of the National Historic Preservation Act of 1966, as amended (16 U.S.C. § 470).</div><div>¹ <i>See</i> ADOT, with concurrence from the FHWA, identified the E1 Alternative as its Preferred Alternative in the Eastern Section (the “E1 Alternative”). <i>See</i> ADOT, South Mountain Study Team, <i>Summary</i>, P. 38, website available at http://www.azdot.gov/Highways/Valley_Freeways/Loop_202/South_Mountain/PDF/south-mountain-loop-202-docs/EIS/summary/Summary.pdf (viewed July 18, 2013). ² The FHWA and ADOT determined that the South Mountain qualified as a Traditional Cultural Property. <i>See</i> ADOT, South Mountain Study Team, <i>Summary</i>, Table S-3, p. S-17 available at http://www.azdot.gov/Highways/Valley_Freeways/Loop_202/South_Mountain/PDF/south-mountain-loop-202-docs/EIS/summary/Summary.pdf (viewed July 18, 2013). ³ For more information on the Gila River Indian Community, please see the official page available at: http://www.gilariver.org/ (viewed July 18, 2013).</div></div>

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292	Cultural Resources	<p>The religious and cultural importance of the South is acknowledged in the Draft Environmental Impact Statement in several locations, notably pages 4-132 and 5-26 as well as in the Summary of the Draft Environmental Impact Statement. The description in the Draft Environmental Impact Statement is based on input received from the Gila River Indian Community and its members and other Indian Nations and their members. The Draft Environmental Impact Statement, after consultation and coordination efforts, accommodates and preserves (to the fullest extent possible from the available alternatives) access to the South Mountains for religious practices. A very small portion of the mountain would be impacted by the proposed freeway (less than 0.03 percent of the total area). Although the Draft Environmental Impact Statement describes the impact on the South Mountains as adverse, Native Americans would not be kept from practicing their beliefs, access to the mountain would be maintained, and mitigation measures would be implemented based on input from members of the Gila River Indian Community.</p> <p>Since the beginning of the environmental impact statement process, the Federal Highway Administration and Arizona Department of Transportation have been carrying out cultural resource studies and engaging in an ongoing, open dialogue with the Gila River Indian Community Tribal Historic Preservation Office regarding the identification and evaluation of places of religious and cultural importance, including the South Mountains, to the Gila River Indian Community that may be adversely affected by the proposed freeway. Information describing the outreach and collaboration can be found in Chapter 2 and in text beginning on pages 4-140 and 5-26 of the Final Environmental Impact Statement. Mitigation measures were suggested in a letter from the Lieutenant Governor of the Gila River Indian Community to the Administrator, Arizona Division, Federal Highway Administration, dated June 23, 2010 (see page A372 of Appendix 2-1 of the Final Environmental Impact Statement). In this letter, the Gila River Indian Community submitted a proposal to address partial measures for the mitigation of adverse effect from the Pecos Road Alignment of the South Mountain Freeway. The Gila River Indian Community’s proposal found the engineering solutions acceptable, but stated that implementation and construction of the proposed freeway would require further consultation. In committing to the evaluation of the South Mountains Traditional Cultural Property, the Arizona Department of Transportation and Federal Highway Administration also committed to the Gila River Indian Community’s participation in ongoing engineering design refinements and acknowledged the importance of all plants and animals in the traditional culture of the Akimel O’odham and Pee Posh of the Gila River Indian Community.</p> <p>To clarify, use of the mountains for the purposes of the proposed freeway represents two-tenths of one percent of the total mountain range. Since 1988, and as part of this environmental impact statement process, several measures have been undertaken and will be undertaken to further reduce effects on the mountains. These measures, including narrowing the design footprint, acquiring replacement land immediately adjacent to the mountains, and the provision of highway crossings, are outlined in text beginning on page 5-23 of the Draft Environmental Impact Statement.</p>

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295	<p>Section 106 of the National Historic Preservation Act of 1966, 16 U.S.C. § 470, requires federal agencies, here the FHWA, to take into account the effects of their actions on historic properties listed on or eligible for inclusion in the National Register of Historic Places (the “NRHP”)⁴ and allow the Advisory Council on Historic Preservation (the “ACHP”) a reasonable opportunity to comment. The ACHP promulgated regulations of the historic preservation review process entitled “Protection of Historic Properties” in 36 C.F.R. Part 800. The Section 106 process is designed to properly identify, assess and mitigate adverse actions on cultural resources. The process requires the lead federal agency to identify historic properties and determine if such properties are eligible for listing in the NRHP. To be determined eligible for listing in the NRHP, properties must be a place of significance in American history, architecture, archaeology, engineering or culture and meet at least one or more of the following criteria:</p> <p>Criterion A. [A]ssociated with events that have made a significant contribution to the broad patterns of our history; or</p> <p>Criterion B. [A]ssociated with the lives of persons significant in our past; or</p> <p>Criterion C. [E]mbody the distinctive characteristics of a type, period or method of construction or that represent the work of a master, or that possess high artistic values or that represent a significant distinguishable entity whose components may lack individual distinction; or</p> <p>Criterion D. [Y]ielded, or may be likely to yield, information important in prehistory or history. They also must possess integrity of location, design, settings, materials, workmanship, feeling and/or association. Properties may be of local, state or national importance.⁵</p> <p>During the development of the Freeway project, the GRIC underwent the process to obtain a Tribal Historic Preservation Officer (THPO) to assist in identifying and nominating historic properties on GRIC’s tribal lands⁶ for the purposes of Section</p>
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<p>⁴ Authorized by the National Historic Preservation Act of 1966, the National Park Service's National Register of Historic Places is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archeological resources. See: http://www.nps.gov/nr/ (viewed on July 19, 2013).</p> <p>⁵ See <i>Id.</i> and National Park Service, National Register Bulletin 38, Guidelines for Evaluating and Documenting Traditional Cultural Properties 1990, available at www.cr.nps.gov/nr/publications/bulletins/nrb38/htm. Criteria for eligibility for being on the National Register are: “associated with events that have made a significant contribution to the broad patterns of our history; are associated with the lives of persons significant in our past; embody the distinctiveness of a type, period, or method of construction, or...represent the work of a master, or...possess high artistic values, or...represent a significant and distinguishable entity whose components may lack individual distinction; or have yielded, or may be likely to yield, information important in prehistory or history.” 36 C.F.R. § 60.4.</p> <p>⁶ Tribal lands means “all lands within the exterior boundaries of any Indian reservation; and ...all dependent Indian communities” (16 U.S.C. § 470w(14)).</p>	

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293	Cultural Resources	Section 106 of the National Historic Preservation Act requires a government-to-government relationship between the Federal Government and Indian tribes as described beginning on page 4-140 of the Final Environmental Impact Statement. Section 106 requires that federal agencies take into account the effects of their undertakings on historic properties. This process requires consultation with tribal authorities. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. The consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Register of Historic Places eligibility recommendations (including traditional cultural properties), project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.
294	Cultural Resources	<p>The cultural and religious places of importance, like the South Mountains, are acknowledged in the Draft Environmental Impact Statement in several locations, notably pages 4-132 and 5-26. The proposed project would accommodate and preserve (to the fullest extent possible from the available alternatives) access to the South Mountains for religious practices.</p> <p>Section 106 of the National Historic Preservation Act requires a government-to-government relationship between the Federal Government and Indian tribes as described beginning on page 4-140 of the Final Environmental Impact Statement. Section 106 requires that federal agencies take into account the effects of their undertakings on historic properties. This process requires consultation with tribal authorities. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. The consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Register of Historic Places eligibility recommendations (including traditional cultural properties), project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.</p> <p>As noted in Table 4-48, which begins on page 4-133 of the Draft Environmental Impact Statement, the Advisory Council on Historic Preservation has been consulted during the Section 106 process.</p>
295	Cultural Resources	The Section 106 process of the National Historic Preservation Act is discussed on page 4-128 of the Draft Environmental Impact Statement.
296	Cultural Resources	Eligibility criteria for inclusion in the National Register of Historic Places are discussed on page 4-128 of the Draft Environmental Impact Statement.
297	Cultural Resources	The Gila River Indian Community’s Tribal Historic Preservation Officer is discussed on page 4-128 of the Draft Environmental Impact Statement.

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	<p>106.⁷ The South Mountain has been approved as a traditional cultural property under criteria A and B.</p>
298	<p>The South Mountain, known in the Pima language as the “Muhadag Do’ag”⁸ and in the Maricopa language as “Avikwaxos” consists of the Ma Ha Tauk, Gila, and Guadalupe Mountain Ranges. The mountain range abuts the northern territory of the GRIC and is the immediate landscape of the northern boundary of the GRIC reservation. A portion of main ridge north and main ridge south of the South Mountain is on GRIC land and serves as the ‘Community’s main, direct physical link to the South Mountains.’ The South Mountain is a prominent figure in oral traditions of both the Akimel O’Odham (Pima) and the Pee Posh (Maricopa).</p>
299	<p>GRIC tribal members and the tribal government hold the South Mountain sacred and see it as central to its creation story. <i>See</i> Gila River Indian Community Resolution No. GR-41-07, A Resolution Designating the South Mountain Range (Muhadag, Avikwaxos) as a Sacred Place and Traditional Cultural Property of the Gila River Indian Community. The E1 Alternative would desecrate the South Mountain by cutting through it, resulting in a devastating negative disparate impact culturally, spiritually, and religiously upon GRIC tribal members.</p>
298	<p>On January 6, 1982, the Gila River Indian Community Tribal Council adopted an ordinance declaring “...as a matter of Community policy and legislative determination, that the public interests of the Pima-Maricopa people and the interests of all other persons living within the jurisdiction of the Gila River Indian Community require that the Community adopt a means whereby all sites, location, structures, and objects of sacred, historical or scientific interest or nature will be protected from desecration, destruction, theft, or other interference.” <i>See</i> Gila River Indian Community Resolution No. GR-01-82.</p> <p>In 1989, the Gila River Indian Community Tribal Council adopted a resolution to preserve the lands of their Hohokam ancestors, by approving the “Policy Statement of the Four Southern Tribes (Salt River Pima-Maricopa Indian Community, Ak-Chin Indian Community, Tohono O’odham Nation, and the Gila River Indian Community) which outlines the Four Tribes’ intent to protect, promote, and preserve cultural affinity to the HuHuKam.” <i>See</i> Gila River Indian Community Resolution No. GR-15-89.</p> <p>Most importantly to the present review, the Gila River Indian Community Tribal Council adopted a tribal resolution affirming that the South Mountain is “a sacred</p>
	<p>⁷ In the absence of a Tribal Historic Preservation Officer (“THPO”), the State Historic Preservation Officer assumes the duties of Section 106 review. Since the onset of the project in July 2001 (see DEIS, Table 2-1, Chapter 2), the GRIC successfully created its own Tribal Historic Preservation Office and employed a THPO.</p> <p>⁸ The DEIS neglects to address the accurate meaning of Muhadag Do’ag, the site which is also known as the South Mountain, South Mountain Range and/or Salt River Mountains (Range) based on the prominent and valid oral history of the GRIC. Do’ag means mountain and Muhadag means greasy.</p>

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298	Cultural Resources	The cultural and religious places of importance, like the South Mountains, are acknowledged in the Draft Environmental Impact Statement in several locations, notably pages 4-132 and 5-26 of the Draft Environmental Impact Statement.
299	Cultural Resources	The cultural and religious places of importance, like the South Mountains, are acknowledged in the Draft Environmental Impact Statement in several locations, notably pages 4-132 and 5-26. The description in the Draft Environmental Impact Statement is based on input received from the Gila River Indian Community and its members and other Indian Nations and their members. The Draft Environmental Impact Statement, after consultation and coordination efforts, accommodates and preserves (to the fullest extent possible from the available alternatives) access to the South Mountains for religious practices. Although the Draft Environmental Impact Statement describes the impacts on the South Mountains as adverse, this would not prohibit Native Americans from continuing to practice their beliefs because only a small fraction of the mountain would be affected, replacement lands would be provided, and access to the mountain would be maintained, and mitigation would be implemented based on input by Native Americans. Several action alternatives were subject to the alternatives development and screening process; not just the E1 Alternative and alternatives located on the Community (Figure 3-6 on page 3-10 of the Draft Environmental Impact Statement illustrates a representation of such alternatives). Ultimately the other alternatives were eliminated from further study in the screening process and the Gila River Indian Community decided not to give permission to study alternatives on its land (see Draft and Final Environmental Impact Statement page 3-25). In June 2013, the Maricopa Association of Governments approved new socioeconomic projections for Maricopa County. The purpose and need and analysis of alternatives were updated and reevaluated using these new population, employment, and housing projections and corresponding projections related to regional traffic. The conclusions reached in the Draft Environmental Impact Statement were reconfirmed in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). Therefore, the Arizona Department of Transportation, with concurrence from the Federal Highway Administration, identified the E1 Alternative as the eastern section of the Preferred Alternative (which includes the W59 Alternative in the western section of the Study Area). In reaching its determination, the Arizona Department of Transportation sought to balance its responsibilities to address regional mobility needs while being fiscally responsible and sensitive to local communities.

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298	<p>place/traditional cultural property ...that...must be kept inviolate thereby recording the sacredness and significance of South Mountain to the people of the GRIC and its tribal government.” <i>See</i> Gila River Indian Community Resolution No. GR-41-07 (April 2007). The resolution further states that the GRIC “strongly opposes any alteration of the South Mountain Range for any purpose”...and that any alteration “...would be a violation of the cultural and religious beliefs of the Gila River Indian Community and would have a negative cumulative effect on the continuing lifeways of the people of the Gila River Indian Community.” <i>Id.</i></p> <p>The O’odham concept of creation is not something in the past but is an ongoing process - one that GRIC members are intrinsically a part of and are obligated to participate in. Members from the Four Southern Tribes fulfill this duty through perennial ceremonies and rituals designed to preserve and stabilize the earth. Failure to fulfill those obligations is believed to result in great harm to the earth and the people who depend on it. Ceremonies are efforts undertaken for specific purposes in accordance with instructions handed down from generation to generation, and when generations of O’odham people are gathered together in the same time and place to carry out ceremony, this is the embodiment of culture. Rituals are performed in prescribed locations that are unique and specific sites possess different spiritual properties and significance. The O’odham are aware that the plants and animals that exist on the South Mountain range possess a kind of healing that cannot be found anywhere else in their current boundaries.</p> <p>O’odham traditionalists and elders of the Four Southern Tribes use portions of the South Mountain for periodic ceremonies and rituals. These are people who are keepers of the tribal peoples’ heritage and culture who possess an essential role believed to sustain the tribal people as a whole. These people are responsible for passing on ceremonies and songs that have been performed for ages. Many O’odham songs are place-specific and refer to a certain mountain or bend in a river, as a way of respecting that place’s centrality to O’odham culture and well-being. O’odham traditionalists also are people who follow the way of living from the earth: picking and harvesting traditional foods like many kinds of cactus fruits, foraging for wild plants to use as traditional medicines, and teaching and guiding the young in the cultural and spiritual ways.</p> <p>Due to the fact that the South Mountain range is used and venerated by O’odham tribes and the Freeway project is a large-scale transportation project impacting a large sacred site footprint, strict adherence to Section 106 should have preceded the preparation and issuance of a DEIS. The Freeway project is noncompliant with Section 106 for the reasons set forth below:</p> <p>a. The DEIS clearly shows that the FHWA and ADOT failed to make reasonable and good faith efforts to consult all federally recognized</p>
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299 (cont.)		<p>After determining that no prudent and feasible alternatives existed to avoid the South Mountains Traditional Cultural Property, efforts were undertaken to minimize harm. These measures are documented, beginning on page 5-27 of the Draft and Final Environmental Impact Statements. Some of these measures included avoidance of specific sites and providing multiuse crossings and fencing that would limit access by freeway users, but allow Gila River Indian Community members to continue to gain access to the site. In addition, the Federal Highway Administration and Arizona Department of Transportation committed to provide funds for the Gila River Indian Community to conduct a full evaluation of the South Mountains Traditional Cultural Property (see page 4-160 of the Final Environmental Impact Statement). Documentation of these efforts are in a letter from the Lieutenant Governor of the Gila River Indian Community to the Administrator, Arizona Division, Federal Highway Administration, dated June 23, 2010 (see page A372 of Appendix 2-1 of the Final Environmental Impact Statement). In this letter, the Gila River Indian Community submitted a proposal for the “Evaluation of Traditional Cultural Property and Adverse Effects of Transportation Corridor Development posed by the proposed construction of the current Pecos Alignment of the South Mountain Freeway.”</p> <p>In committing to the evaluation of the South Mountains Traditional Cultural Property, the Federal Highway Administration and Arizona Department of Transportation also committed to the Gila River Indian Community’s participation in ongoing engineering design refinements and acknowledged the significance of all plants and animals in the traditional culture of the Akimel O’odham and Pee Posh of the Gila River Indian Community.</p>
300	Cultural Resources	<p>Strict adherence to Section 106 of the National Historic Preservation Act not only preceded the preparation and issuance of a Draft Environmental Impact Statement, but is ongoing and will continue. The Draft and Final Environmental Impact Statements comply with Section 106 of the National Historic Preservation Act. The Section 106 process is documented in Table 4-47 beginning on page 4-145 of the Final Environmental Impact Statement.</p>

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301	<p>Indian tribes that may attach religious and cultural significance to the Area of Potential Effects <i>See Id.</i> at §800.3(f)(2).⁹</p> <p>The DEIS appears to suggest that FHWA and ADOT properly noticed, hosted, held and/or facilitated numerous meetings with the GRIC and perhaps, other tribes.¹⁰ Table 2-1 in the DEIS illustrates that the project initiated in July of 2001, however, no subsequent record of meetings with any other tribe (other than the GRIC) is demonstrated in the table until March 18, 2011.¹¹ In other words, no other tribes appear to have been consulting parties nor were they present at the onset of the project. The only reference to solicitation of tribal input other than the GRIC did not occur until March 18, 2011. The GRIC was the only tribe at the table throughout the majority of the project for <i>over ten (10) years</i>. The DEIS fails to demonstrate any reasonable and good faith effort to bring all interested and impacted tribes to the table. Further Table 4-48 demonstrates that only one tribe, the Hopi Tribe, concurred on the Section 106 consultations. According to the DEIS, one other tribe, the Yavapai-Prescott Indian Tribe, deferred its participation to the Southern Tribes and all other tribes, including the GRIC, neither responded nor concurred with the Section 106 findings. The data speaks for itself. The tribes have been left almost entirely out of a project that has been under development since 2001. The tribes, however, are on record for openly and voluntarily asserting the significant cultural, traditional and religious attachment to the sacred site.</p> <p>Table 4-48 in the DEIS demonstrates that nearly each federally-recognized tribe associated with the Freeway project has opted to either refrain from responding to the FHWA and ADOT or has, in some rare instances, deferred its position to the Southern Tribes. The record, again, reflects an abundant failure on behalf of the FHWA and ADOT to gain meaningful consultation with the affected tribes, having performed outreach to only to the GRIC, one of the Four Southern Tribes. The Salt River Pima-Maricopa Indian Community, Ak-Chin Indian Community, and Tohono O’odham Nation have not been consulted as stakeholders despite the fact that FHWA and ADOT are on record as having been directed to do so by at least one other government - the Yavapai-Prescott Indian Tribe. The record further shows that the majority of the tribes affected by the undertaking were not consulted early in the project’s planning process via the initial scoping process, and were consequently not consulted about the technical reports, consultants and cultural expertise necessary to promulgate accurate findings.</p> <p>⁹ 36 C.F.R. § 800.3(f)(2)states, “Involving Indian tribes and Native Hawaiian organizations. The agency official shall make a reasonable and good faith effort to identify any Indian tribes or Native Hawaiian organizations that might attach religious and cultural significance to historic properties in the area of potential effects and invite them to be consulting parties. Such Indian tribe or Native Hawaiian organization that requests in writing to be a consulting party shall be one.”</p> <p>¹⁰ <i>See</i> South Mountain Freeway (Loop 202) Draft Environmental Impact Statement and Section 4(f) Evaluation, April 2013, Chapter 2-4.</p> <p>¹¹ <i>See Id.</i>, Chapter 2-4, Table 2-2 (2013).</p>

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301	Cultural Resources	<p>As noted in Table 4-47, which begins on page 4-145 of the Final Environmental Impact Statement, the Ak-Chin Indian Community, the Gila River Indian Community, the Hopi Tribe, the Salt River Pima-Maricopa Indian Community, the Tohono O’odham Nation, the Yavapai-Apache Tribe, and the Yavapai-Prescott Indian Tribe were included in the initial Section 106 consultation in 2003. At that time, Yavapai-Prescott Indian Tribe deferred to the Four Southern tribes in a response dated September 10, 2003. Hopi concurred, but did not defer at this time. As more information regarding the project was known (and of aboriginal lands), all of the tribes with aboriginal lands within the project (including the Yavapai-Prescott Indian Tribe) were consulted in 2005, 2006, 2012, and 2013. In August 2005, both the Salt River Pima-Maricopa Indian Community and the Tohono O’odham Nation agreed to be a concurring party to the programmatic agreement. A response from Salt River Pima-Maricopa Indian Community dated August 14, 2012, cited an existing consultation management agreement in place between the Four Southern Tribes and stated that the Four Southern Tribes are in consensus that Gila River Indian Community would take the lead in providing comments for the project.</p> <p>As noted in Table 4-47, which begins on page 4-145, and also on page 4-150 of the Final Environmental Impact Statement, all tribes were contacted early in the study and have been consulted on many aspects of the study, including the cultural resource-related reports produced over the course of the study.</p> <p>Consultation with Native America tribes has been extensive and demonstrates a reasonable and good faith effort to include all interested Native American tribes in the process to take their concerns seriously in the planning effort.</p>

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302	<p>b. The FHWA and ADOT did not have authority to delegate its statutory obligations under Section 106 to conduct consultation and conduct community and public outreach. See 36 C.F.R. §800.8</p>
303	<p>Section 106 states that, “[f]ederal agencies are encouraged to coordinate compliance with section 106 and the procedures in this part with any steps taken to meet the requirements of the National Environmental Policy Act (NEPA). Agencies should consider their Section 106 responsibilities as early as possible in the NEPA process, and plan their public participation, analysis, and review in such a way that they can meet the purposes and requirements of both statutes in a timely and efficient manner (emphasis added).” <i>Id.</i> at §800.8(1). Further, Section 106 requires that the agency official shall, “(i) Identify consulting parties...; (ii) Identify historic properties and assess the effects of the undertaking on such properties...; (iii) Consult regarding the effects of the undertaking on historic properties with SHPO/THPO, Indian tribes and Native Hawaiian organizations that might attach religious and cultural significance to the affected historic properties, other consulting parties, and the Council, where appropriate, during NEPA scoping, environmental analysis, and the preparation of NEPA documents; (iv) Involve the public in accordance with the agency’s published NEPA procedures; and (v) Develop in consultation with identified consulting parties alternatives and proposed measures that might avoid, minimize or mitigate any adverse effects of the undertaking on historic properties and describe them in the EA or DEIS (emphasis added).” <i>Id.</i> at §800.8(2). Nowhere in the regulations is the federal agency permitted to delegate these duties, whether through a Programmatic Agreement, or otherwise.</p>
304	<p>In the instant case, FHWA and ADOT simply delegated its responsibility to consult with the tribal community to the GRIC tribal government. The DEIS appears to suggest that numerous meetings regarding the Freeway project were noticed, hosted and facilitated by the FHWA and ADOT. The DEIS does not clarify whether the GRIC tribal government entities, or any sub-entities thereof actually noticed, hosted and facilitated such meetings. While Section 106 allows for procedural variances when, like in the present case, a DEIS is drafted under the National Environmental Policy Act (the “NEPA”), 42 U.S.C. 4321 et seq., Section 106 does not procedurally allow FHWA or ADOT to delegate the Section 106 initiation and consultation measures to any other entity. See 36 C.F.R. §800.8. In other words, FHWA is required to directly initiate and consult tribes and consulting parties. The DEIS record reflects that the FHWA regularly consulted federal and state agencies, however, neglected reasonable and good faith efforts to consult tribes other than the GRIC. The record also shows that FHWA, ADOT and the designated GRIC government entities failed to properly notify and/or consult with GRIC members.</p>

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302	Cultural Resources	The Arizona Department of Transportation and Federal Highway Administration did not delegate statutory obligations.
303		Comment noted.
304	Cultural Resources	<p>This comment seems to be confusing National Historic Preservation Act Section 106 consultation, project scoping, and Federal Highway Administration/ Arizona Department of Transportation/Gila River Indian Community coordination and planning meetings. Section 106 of the National Historic Preservation Act requires a government-to-government relationship between the Federal Government and Indian tribes as described beginning on page 4-140 of the Final Environmental Impact Statement. Section 106 requires that federal agencies take into account the effects of their undertakings on historic properties. This process requires consultation with tribal authorities. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. The consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Register of Historic Places eligibility recommendations (including traditional cultural properties), project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.</p> <p>As noted in Table 4-47, which begins on page 4-145 of the Final Environmental Impact Statement, the Ak-Chin Indian Community, the Gila River Indian Community, the Hopi Tribe, the Salt River Pima-Maricopa Indian Community, the Tohono O’odham Nation, the Yavapai-Apache Tribe, and the Yavapai-Prescott Indian Tribe were included in the initial Section 106 consultation in 2003. At that time, Yavapai-Prescott Indian Tribe deferred to the Four Southern tribes in a response dated September 10, 2003. Hopi concurred, but did not defer at this time. As more information regarding the project was known (and of aboriginal lands), all of the tribes with aboriginal lands within the project (including the Yavapai-Prescott Indian Tribe) were consulted in 2005, 2006, 2012, and 2013. In August 2005, both the Salt River Pima-Maricopa Indian Community and the Tohono O’odham Nation agreed to be a concurring party to the programmatic agreement. A response from Salt River Pima-Maricopa Indian Community dated August 14, 2012, cited an existing consultation management agreement in place between the Four Southern Tribes and stated that the Four Southern Tribes are in consensus that Gila River Indian Community would take the lead in providing comments for the project.</p>

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305	<p>The DEIS indicates that FHWA and ADOT utilized the GRIC and its sub-entities such as the Transportation Technical Team (the “TTT”)¹² to provide notice, host and facilitate numerous meetings on its behalf. <i>See</i> Table 2-1. Section 106, particularly §800.8, does not permit the GRIC to act on FHWA and ADOT’s behalf to carry out procedural requirements of the project. Many meetings referenced in the DEIS appeared to be “tribal meetings” that included guest presentations by the FHWA and/or ADOT to the Gila River community members. Tables 2-1 and 2-2 in the DEIS appears to comingle the facts of any particular meeting in terms of meeting the agency’s responsibilities under Section 106, particularly, §800.8.</p>
306	<p>c. Because FHWA and ADOT failed to consult all federally recognized Indian tribes with reasonable and good faith efforts, the identification of historic properties, assessment of adverse effects, and resolution of adverse effects are inaccurate, incomplete and erroneous.</p>
307	<p>Not only is the South Mountain itself sacred, there are also numerous sites with highly significant meaning and purpose to the GRIC on or near South Mountain and within the Area of Potential Effects of the Freeway project.¹³ There are many ancestral burial and archeological sites and ancient shrines throughout the project area and beyond.¹⁴ Further, the Colorado River Indian Tribes,¹⁵ Salt River Pima-Maricopa Indian Community,¹⁶ the Ak-Chin Indian Community,¹⁷ the Tohono O’odham Nation,¹⁸ and the Pascua Yaqui Tribe¹⁹ have expressed and attached traditional, cultural and religious significance to South Mountain.²⁰</p> <p>¹² <i>See Id.</i> Chapter 2, page 2-3. <i>See also</i> Table 2-2 crediting various meetings with the TTT.</p> <p>¹³ For example, tribes associate cultural, traditional and religious significance with the Red Mountain, South Back Mountain, and Sandi Muck Mountain.</p> <p>¹⁴ For an illustration on archaeological sites, please view YouTube, <i>South Mountain Freeway Protest</i>, https://www.youtube.com/watch?v=IMws03pJ0iE (viewed July 18, 2013).</p> <p>¹⁵ <i>See</i> the official website of the Colorado River Indian Tribes also known as the “CRIT”, available at: http://www.crit-nsn.gov/ (viewed July 8, 2013).</p> <p>¹⁶ <i>See</i> the official website of the Salt River Pima-Maricopa Indian Community available at: http://www.srpmic-nsn.gov/ (viewed July 18, 2013).</p> <p>¹⁷ <i>See</i> the official website of the Ak-Chin Indian Community, http://www.ak-chin.nsn.us/ (viewed July 18, 2013).</p> <p>¹⁸ <i>See</i> the official website of the Tohono O’odham Nation, http://www.tonation-nsn.gov/default.aspx (viewed July 18, 2013).</p> <p>¹⁹ <i>See</i> the official website of the Pascua Yaqui Tribe, http://www.pascuayaqui-nsn.gov/ (viewed July 18, 2013).</p> <p>²⁰ The DEIS states “archaeological sites and places considered culturally important by Native American groups would be affected by any of the build alternatives. The Gila River Indian Community (GRIC) and the Salt River Pima-Maricopa Indian Community have both passed Tribal Resolutions designating the South Mountains as a TCP [Traditional Cultural Property] and the Colorado River Indian tribes have said that they also consider the South Mountains a TCP.” <i>See</i> South Mountain Transportation Corridor Draft Technical Report Summary Cultural Resources p. 4 (August 28, 2008) available at http://www.azdot.gov/southmountainfreeway/PDF/082808_SMCAT_CulturalResources_Summary_Final.pdf (viewed July 18, 2013).</p>

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305	Cultural Resources	<p>Public involvement with the Gila River Indian Community was conducted as requested by the tribal government. Prior to October 2005, early efforts to involve the Gila River Indian Community included attending tribal meetings and monthly meetings with Gila River Indian Community Departments (see discussion beginning on page 2-8 of the Draft Environmental Impact Statement). On October 14, 2005, the Gila River Indian Community requested that all project-related communications take place at a government-to-government level (see letter on page A152 of Appendix 1-1). This request was honored by the Arizona Department of Transportation and Federal Highway Administration. All public involvement efforts were implemented by the Gila River Indian Community's public involvement officer.</p> <p>As stated on page 2-8 of the Draft Environmental Impact Statement, the meetings in 2010 between the Gila River Indian Community's Transportation Technical Team, Arizona Department of Transportation, and the Federal Highway Administration were held in response to a request received from the Governor of the Gila River Indian Community and were not a part of the agency or public scoping process. The information provided to the Transportation Technical Team was used by the Team and the Public Information Office in the Gila River Indian Community's outreach effort prior to the February 2012 coordinated referendum. The referendum and the outreach effort were tribal actions and, other than providing requested information to the Gila River Indian Community, the Arizona Department of Transportation and Federal Highway Administration did not participate in these actions.</p>
306	Cultural Resources	<p>Section 106 of the National Historic Preservation Act requires a government-to-government relationship between the Federal Government and Indian tribes as described beginning on page 4-140 of the Final Environmental Impact Statement. Section 106 requires that federal agencies take into account the effects of their undertakings on historic properties. This process requires consultation with tribal authorities. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. The consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Register of Historic Places eligibility recommendations (including traditional cultural properties), project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.</p> <p>As noted in Table 4-47, which begins on page 4-145 of the Final Environmental Impact Statement, the Ak-Chin Indian Community, the Gila River Indian Community, the Hopi Tribe, the Salt River Pima-Maricopa Indian Community, the Tohono O'odham Nation, the Yavapai-Apache Tribe, and the Yavapai-Prescott Indian Tribe were included in the initial Section 106 consultation in 2003. At that time, Yavapai-Prescott Indian Tribe deferred to the Four Southern tribes in a response dated September 10, 2003. Hopi concurred, but did not defer at this time. As more information regarding the project was known (and of aboriginal lands), all of the tribes with aboriginal lands within the project (including the Yavapai-Prescott Indian Tribe and the Colorado River Indian Tribes) were consulted in 2005, 2006, 2012, and 2013. In August 2005, both the Salt River Pima-Maricopa Indian Community and the Tohono O'odham Nation agreed to be a concurring party to the programmatic agreement. A response from Salt River Pima-Maricopa Indian Community dated August 14, 2012, cited an existing consultation management agreement in place between the Four Southern Tribes and stated that the Four Southern Tribes are in</p>

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306 (cont.)		consensus that Gila River Indian Community would take the lead in providing comments for the project. Since the beginning of the environmental impact statement process for the proposed freeway, the Federal Highway Administration and Arizona Department of Transportation have been carrying out cultural resources studies and engaging in an ongoing, open dialogue with the Gila River Indian Community, its Tribal Historic Preservation Officer and Cultural Resource Management Program, regarding the identification and evaluation of places of religious and cultural importance to the tribe that may be adversely affected by the proposed freeway. The Gila River Indian Community's own Cultural Resource Management Program performed the cultural field investigations and developed recommendations for mitigation for project impacts. As a result of these discussions and of studies conducted by the Gila River Indian Community's Cultural Resource Management Program, the Gila River Indian Community has identified traditional cultural properties that are eligible for listing in the National Register of Historic Places and that could be affected by construction of the proposed South Mountain Freeway. The traditional cultural properties identified are culturally important to other Native American tribes as well.
307	Cultural Resources	As noted in Table 4-47, which begins on page 4-145 of the Final Environmental Impact Statement, the Ak-Chin Indian Community, the Gila River Indian Community, the Hopi Tribe, the Salt River Pima-Maricopa Indian Community, the Tohono O'odham Nation, the Yavapai-Apache Tribe, and the Yavapai-Prescott Indian Tribe were included in the initial Section 106 consultation in 2003. At that time, Yavapai-Prescott Indian Tribe deferred to the Four Southern tribes in a response dated September 10, 2003. Hopi concurred, but did not defer at this time. As more information regarding the project was known (and of aboriginal lands), all of the tribes with aboriginal lands within the project (including the Yavapai-Prescott Indian Tribe and the Colorado River Indian Tribes) were consulted in 2005, 2006, 2012, and 2013. In August 2005, both the Salt River Pima-Maricopa Indian Community and the Tohono O'odham Nation agreed to be a concurring party to the programmatic agreement. A response from Salt River Pima-Maricopa Indian Community dated August 14, 2012, cited an existing consultation management agreement in place between the Four Southern Tribes and stated that the Four Southern Tribes are in consensus that Gila River Indian Community would take the lead in providing comments for the project. Since the beginning of the environmental impact statement process for the proposed freeway, the Federal Highway Administration and Arizona Department of Transportation have been carrying out cultural resources studies and engaging in an ongoing, open dialogue with the Gila River Indian Community, its Tribal Historic Preservation Officer and Cultural Resource Management Program, regarding the identification and evaluation of places of religious and cultural importance to the tribe that may be adversely affected by the proposed freeway. Such places are referred to as traditional cultural properties. The Gila River Indian Community's own Cultural Resource Management Program performed the cultural field investigations and developed recommendations for mitigation for project impacts. As a result of these discussions and of studies conducted by the Gila River Indian Community's Cultural Resource Management Program, the Gila River Indian Community has identified traditional cultural properties that are eligible for listing in the National Register of Historic Places and that could be affected by construction of the proposed freeway. In certain cases, listing these properties on the National Register of Historic Places may offer them protection under Section 4(f) of the Department of Transportation Act. The traditional cultural properties identified are culturally important to other Native American tribes as well and as noted in Table 4-47, which begins on page 4-145 of the Final Environmental Impact Statement, these tribes were included in Section 106 consultation.

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307	<p>As discussed in subsection (b) above, FHWA and ADOT lacked critical cultural expertise and input that could have more accurately shaped the scope of the technical services used to identify the known and potential cultural resources at issue by not making reasonable and good faith efforts to engage the above-referenced tribes. Should the critical consultation with all tribes have been performed as required by the Section 106 regulations, the footprint of the cultural resources identified would be more accurate and would unquestionably fulfill applicability of cultural significance under the NRHP and National Historic Preservation Act. Further, all tribes were not afforded the opportunity early in the project planning to properly select a qualified contractor to perform the cultural resources studies, many of which the FHWA and the ADOT improperly puts off until the “design phase”. The scope of work and approving the qualifications of the identifier of cultural sites are critical procedural oversights when tribal input is absent.</p> <p>d. Because FHWA and ADOT failed to fully inform Section 106 consulting parties of the potential environmental impacts of the Freeway project, the consulting parties were unable to provide accurate input on the assessment of adverse effects of all known historic properties.</p>
308	<p>Consulting parties and tribes not consulted were not afforded the technical data available to FHWA and ADOT regarding the substantial risk to the environment prior to the close of the Section 106 process. For example, the consulting parties were not timely provided certain reports, including but not limited to the Environmental Protection Agency’s Joint Air Toxic Assessment Project issued in 2005. The deficiencies in the initiation of the Section 106 process combined with the lack of data known to the FHWA and ADOT unquestionably left the consulting parties and tribes not consulted at a disadvantage. Tribes involved in the project, whether consulted or not, are unable to provide meaningful consultation in the Section 106 process when the FHWA and ADOT withholds information that may impact the parties’ input on the assessment and mitigation processes within the regulations.</p>
309	<p>If the E1 Alternative were built, there are eight confirmed Traditional Cultural Properties that would be adversely affected. Those properties include petroglyphs, artifact scatter, and prehistoric trails. The DEIS and other associated cultural reports do not provide any concurrence on the improperly scoped traditional cultural studies by the parties and non-consulted tribes and does not demonstrate completion of the Section 106 process, particularly the mitigation measures to be invoked.</p>
310	<p>Until the FHWA and ADOT conforms wholly with informed meaningful consultation with consulting parties and affected tribes, the Section 106 process will remain incomplete and non-compliant.</p>

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308	Cultural Resources	<p>As noted in Table 4-47, which begins on page 4-145, and also on page 4-159 of the Final Environmental Impact Statement, all tribes were contacted early in the study and have been consulted on many aspects of the study, including the cultural resource-related reports produced over the course of the study.</p> <p>Section 106 of the National Historic Preservation Act requires a government-to-government relationship between the Federal Government and Indian tribes as described beginning on page 4-140 of the Final Environmental Impact Statement. Section 106 requires that federal agencies take into account the effects of their undertakings on historic properties. This process requires consultation with tribal authorities. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. The consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Register of Historic Places eligibility recommendations (including traditional cultural properties), project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed. As stated above, Section 106 requires federal consultation with tribal authorities on the effects of their undertakings on historic properties. Although the Joint Air Toxics Assessment Project is discussed on pages 4-64 and 4-74 of the Draft and Final Environmental Impact Statements, respectively, Section 106 consultation on this report is not required.</p>
309	Cultural Resources	<p>The comment that eight traditional cultural properties would be adversely affected is incorrect. Adverse effects to the South Mountains Traditional Cultural Property and one site that is contributing to the South Mountains Traditional Cultural Property (AZ T:12:197) would occur with the construction of the E1 Alternative. No extant petroglyph sites would be adversely affected. The trail sites were determined eligible for listing in the National Register of Historic Places listing under Criterion D as archaeological sites; therefore, as noted on page 5-2 of the Draft Environmental Impact Statement, generally, cultural resources eligible for listing in the National Register of Historic Places under Criterion D are not eligible for protection under Section 4(f). Through consultation and coordination, the Gila River Indian Community Tribal Historic Preservation Office, the Arizona State Historic Preservation Office, and many other tribal authorities concurred with these recommendations (see Table 4-47 on page 4-145 of the Final Environmental Impact Statement for more details on tribal concurrences).</p> <p>Since the beginning of the environmental impact statement process for the proposed freeway, the Federal Highway Administration and Arizona Department of Transportation have been carrying out cultural resources studies and engaging in an ongoing, open dialogue with the Gila River Indian Community, its Tribal Historic Preservation Officer and Cultural Resource Management Program, regarding the identification and evaluation of places of religious and cultural importance to the tribe that may be adversely affected by the proposed freeway. Such places are referred to as traditional cultural properties. The Gila River Indian Community’s own Cultural Resource Management Program performed the cultural field investigations and developed recommendations for mitigation for project impacts. As a result of these discussions and of studies conducted by the Gila River Indian Community’s Cultural Resource Management Program, the Gila River Indian Community has identified traditional cultural properties that are eligible for listing in the National Register of Historic Places and that could be affected by construction of the proposed freeway. In certain cases, listing these properties on the National</p>

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311	e. The DEIS lacks crucial aerial photography, charts, maps and diagrams illustrating the potential destruction of cultural properties and fails to address known impacts to religious practice.
312	<p>The DEIS fails to provide aerial photography, maps, charts or diagrams that properly informs the public of the Area of Potential Effects upon known and potential cultural sites and resources. Further, the DEIS fails to address any impacts to air, ground and water directly and indirectly related to the cultural resources impacted during the temporary state of construction of the Freeway. The DEIS fails to address documented concerns regarding religious practice including measures to ensure that religious practitioners gain and maintain uninterrupted access to sacred cultural properties and religious practice locations impacted by the Freeway project. In fact, the FHWA and ADOT have determined that the trails located within the project area do not qualify under the NRHP, however, the DEIS lacks any reference as to whether any one of the trails or all of the trails are routes used for religious practice purposes and therefore, should be afforded a higher value of significance under the criterion. Further, shortcomings in the initiation of the Section 106 process, lack of input from affected tribes, lack of good faith and reasonable efforts by the FHWA and ADOT all contribute to faulty application of the criterion against the properties found within the Area of Potential Effects.</p>
313	<p>In addition, the DEIS does not confirm that the Section 106 process is complete and that the FHWA and ADOT acquired concurrence by the Tribal Historic Preservation Officer or the State Historic Preservation Officer on its findings. The South Mountain Transportation Corridor Study, Citizens Advisory Team Draft Technical Support Summary, Cultural Resources (2008)²¹ (the “SMT Corridor Study”) confirms that “[t]he greatest number of prehistoric sites would be impacted by the E1 Alternative...”²² In fact, the E1 Alternative is determined to impact at least 8 sites described as, “1 artifact scatter (limited activity site); 2 lithic quarries; 1 petroglyph site; 4 trail sites”.²³ The SMT Corridor Study confirms that the Section 106 process is incomplete²⁴ and that mitigation measures including work plans, research designs, methods and excavation strategies, burial agreements with the Arizona State Museum and tribes are all outstanding.²⁵ Instead of completing the process as required and needed on a project of this magnitude, the FHWA and ADOT opted to propose and execute a seemingly unpopular Programmatic Agreement (“PA”)</p> <p>²¹ See South Mountain Transportation Corridor Study, Citizens Advisory Team Draft Technical Support Summary, Cultural Resources (2008) available at: http://www.azdot.gov/southmountainfreeway/PDF/082808_SMCAT_CulturalResources_Summary_Final.pdf (viewed July 19, 2013).</p> <p>²² <i>Id.</i> at p. 2.</p> <p>²³ <i>Id.</i> at p. 3.</p> <p>²⁴ <i>Id.</i> at p. 4.</p> <p>²⁵ <i>Id.</i> at p. 5.</p>

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309 (cont.)		Register of Historic Places may offer them protection under Section 4(f) of the Department of Transportation Act. The traditional cultural properties identified are culturally important to other Native American tribes as well and as noted in Table 4-47, which begins on page 4-145 of the Final Environmental Impact Statement, these tribes were included in Section 106 consultation.
310	Cultural Resources	The proposed action’s environmental impact statement process has complied with the National Historic Preservation Act Section 106 process, which, for the proposed action, is ongoing and continuing.
311	Cultural Resources	<p>The Study Area as shown in Figure 1-1 on page 1-3 of the Draft Environmental Impact Statement includes the area of potential effects. In addition, consultation letters sent to consulting parties included maps and complete reports for their reference. The location of cultural resources are not shown in the Draft Environmental Impact Statement because the publishing of location information would put the sites in danger of pilfering and/or vandalism. Adverse effects to the South Mountains Traditional Cultural Property and one site that is contributing to the South Mountains Traditional Cultural Property (AZ T:12:197) would occur with the construction of the E1 Alternative. No extant petroglyph sites would be adversely affected. The trail sites were determined eligible for listing in the National Register of Historic Places listing under Criterion D as archaeological sites. Through Section 106 consultation and coordination, the Gila River Indian Community Tribal Historic Preservation Office, the Arizona State Historic Preservation Office, and many other tribal authorities concurred with these recommendations (see Table 4-47 on page 4-145 of the Final Environmental Impact Statement for more details on tribal concurrences).</p> <p>As stated above, Section 106 requires federal consultation with tribal authorities on the effects of their undertakings on historic properties. In cases where air, ground, or water attributes were considered important to their eligibility to the National Register of Historic Places, this information would have been addressed during the consultation process. If the Federal Highway Administration had no information suggesting the significance of air, ground, or water attributes, and none of the consulting parties responded to consultation by saying those attributes were important and requesting they be considered, the Federal Highway Administration would have no reason to consider them, and further Section 106 consultation on these attributes would not have been required.</p>
312	Cultural Resources	<p>The Study Area as shown in Figure 1-1 on page 1-3 of the Draft Environmental Impact Statement includes the area of potential effects. In addition, consultation letters sent to consulting parties included maps and complete reports for their reference. The location of cultural resources are not shown in the Draft Environmental Impact Statement because the publishing of location information would put the sites in danger of pilfering and/or vandalism.</p> <p>The project would not preclude access to the South Mountains. Adverse effects on traditional cultural practices, including religious activities, would be mitigated through the development and implementation of the traditional cultural property mitigation program being developed for the proposed project through ongoing National Historic Preservation Act Section 106 consultations and by mitigation identified in Chapter 4 of the Draft Environmental Impact Statement that would avoid, reduce, minimize or otherwise mitigate air, ground, and water-related impacts. This applies equally to any impacts during construction of the proposed freeway, should an action alternative be the Selected Alternative.</p> <p>The Draft Environmental Impact Statement describes a proposed action that, after consultation and coordination efforts, would accommodate and preserve (to the</p>

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313	<p>with certain parties and tribes to address “steps and procedures that would be undertaken to address any effects as they were to become known.”²⁶ The decision to enter into a PA not only removes the project activities from the eyes of the public, but circumvents the statutory requirements and public policy governing the approval process of the project.</p> <p>f. The DEIS fails to confirm that the Tribal Historic Preservation Office has concurred with the FHWA and ADOT’s conclusions on eligibility of all cultural sites against the National Registry’s criterion.</p> <p>The DEIS does not address why the THPO and the GRIC have opted to refrain from concurring on the Section 106 findings. The DEIS should not proceed forward without, in the least, valid Section 106 compliance. The DEIS fails to suggest when concurrence might be reached, why concurrence has not yet been made, and/or any other actions associated with the same.</p> <p>g. The DEIS fails to address proposed mitigation measures to the irreversible harm the Freeway project will cause on known cultural resources.</p> <p>Without addressing the FHWA and ADOT’s planned mitigation of adverse effects upon the known cultural resources, the public, tribes and the Gila River Indian Community remain uninformed and unable to substantively comment on the DEIS. In other words, interested persons are left to speculate on mitigation measures on a large-scale project affecting hundreds of cultural properties. The DEIS does not mention whether it has drafted a mitigation plan, the scope of such a plan, the parties consulted, the measures to be taken, citations to procedural and substantive laws that apply in any such instance, the availability of funding and liability protections, curation agreements, curation space, technical qualifications of on-the-ground archaeologists, curation specialists or assistants, implications and coordination with tribes of any potential implications to the National Graves Protection and Repatriation Act, 25 U.S.C. 3001 et seq.²⁷ The DEIS confirms that the critical procedural requirement of mitigation in the Section 106 process is lacking.²⁸</p> <p>²⁶ <i>Id.</i> at p. 7. The PA received little support from tribes on the record.</p> <p>²⁷ The Native American Graves Protection and Protection Act (“NAGPRA”) requires federal agencies and institutions that receive federal funding to return Native American “cultural items” to lineal descendants and culturally affiliated Indian tribes and Native Hawaiian organizations. Cultural items include human remains, funerary objects, sacred objects, and objects of cultural patrimony. NAGPRA also establishes procedures for the inadvertent discovery or planned excavation of Native American cultural items on federal or tribal lands. While these provisions do not apply to discoveries or excavations on private or state lands, the collection provisions of NAGPRA may apply to Native American cultural items if they come under the control of an institution that receives federal funding.</p> <p>²⁸ Mitigation measures lack proper consultation with tribes and consulting parties and are merely speculative as of the date of this Complaint. <i>See</i> ADOT, South Mountain Study Team, <i>Summary</i>, Table S-4, p. S-27 available</p>

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312 (cont.)		<p>fullest extent possible from the available alternatives) access to the South Mountains for religious practices. A very small portion of the mountain would be impacted by the proposed freeway (less than 0.03 percent of the total area). Although the Draft Environmental Impact Statement describes the impact on the South Mountains as adverse, Native Americans would not be kept from practicing their beliefs, access to the mountain would be maintained, and mitigation measures would be implemented based on input from members of the Gila River Indian Community.</p> <p>The Federal Highway Administration recommended the trails within the project area as eligible for listing in the National Register of Historic Places under Criterion D as archaeological sites. Based on review of the traditional cultural property technical summary, the Bureau of Indian Affairs, City of Phoenix, State Historic Preservation Office, Cocopah Tribe, Colorado River Indian Tribes, Fort McDowell Yavapai Nation, Gila River Indian Community, Hopi Tribe, Navajo Nation, San Carlos Apache Tribe, Tonto Apache Tribe, and White Mountain Apache Tribe, the Gila River Indian Community Tribal Historic Preservation Officer and Arizona State Historic Preservation Office concurred with these recommendations.</p>
313	Cultural Resources	<p>The cultural and religious places of importance, like the South Mountains, are acknowledged in the Draft Environmental Impact Statement in several locations, notably pages 4-132 and 5-26.</p> <p>Section 106 of the National Historic Preservation Act requires a government-to-government relationship between the Federal Government and Indian tribes as described beginning on page 4-140 of the Final Environmental Impact Statement. Section 106 requires that federal agencies take into account the effects of their undertakings on historic properties. This process requires consultation with tribal authorities. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. The consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Register of Historic Places eligibility recommendations (including traditional cultural properties), project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.</p> <p>Adverse effects to the South Mountains Traditional Cultural Property and one site that is contributing to the South Mountains Traditional Cultural Property (AZ T:12:197) would occur with the construction of the E1 Alternative. No extant petroglyph sites would be adversely affected. The trail sites were determined eligible for listing in the National Register of Historic Places listing under Criterion D as archaeological sites; therefore, as noted on page 5-2 of the Draft Environmental Impact Statement, generally, cultural resources eligible for listing in the National Register of Historic Places under Criterion D are not eligible for protection under Section 4(f). Through consultation and coordination, the Gila River Indian Community Tribal Historic Preservation Office, the Arizona State Historic Preservation Office, and many other tribal authorities concurred with these recommendations (see Table 4-47 on page 4-145 for more details on tribal concurrences).</p>

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314	<p>with certain parties and tribes to address “steps and procedures that would be undertaken to address any effects as they were to become known.”²⁶ The decision to enter into a PA not only removes the project activities from the eyes of the public, but circumvents the statutory requirements and public policy governing the approval process of the project.</p> <p>f. The DEIS fails to confirm that the Tribal Historic Preservation Office has concurred with the FHWA and ADOT’s conclusions on eligibility of all cultural sites against the National Registry’s criterion.</p> <p>The DEIS does not address why the THPO and the GRIC have opted to refrain from concurring on the Section 106 findings. The DEIS should not proceed forward without, in the least, valid Section 106 compliance. The DEIS fails to suggest when concurrence might be reached, why concurrence has not yet been made, and/or any other actions associated with the same.</p> <p>g. The DEIS fails to address proposed mitigation measures to the irreversible harm the Freeway project will cause on known cultural resources.</p> <p>Without addressing the FHWA and ADOT’s planned mitigation of adverse effects upon the known cultural resources, the public, tribes and the Gila River Indian Community remain uninformed and unable to substantively comment on the DEIS. In other words, interested persons are left to speculate on mitigation measures on a large-scale project affecting hundreds of cultural properties. The DEIS does not mention whether it has drafted a mitigation plan, the scope of such a plan, the parties consulted, the measures to be taken, citations to procedural and substantive laws that apply in any such instance, the availability of funding and liability protections, curation agreements, curation space, technical qualifications of on-the-ground archaeologists, curation specialists or assistants, implications and coordination with tribes of any potential implications to the National Graves Protection and Repatriation Act, 25 U.S.C. 3001 et seq.²⁷ The DEIS confirms that the critical procedural requirement of mitigation in the Section 106 process is lacking.²⁸</p> <p>²⁶ <i>Id.</i> at p. 7. The PA received little support from tribes on the record.</p> <p>²⁷ The Native American Graves Protection and Protection Act (“NAGPRA”) requires federal agencies and institutions that receive federal funding to return Native American “cultural items” to lineal descendants and culturally affiliated Indian tribes and Native Hawaiian organizations. Cultural items include human remains, funerary objects, sacred objects, and objects of cultural patrimony. NAGPRA also establishes procedures for the inadvertent discovery or planned excavation of Native American cultural items on federal or tribal lands. While these provisions do not apply to discoveries or excavations on private or state lands, the collection provisions of NAGPRA may apply to Native American cultural items if they come under the control of an institution that receives federal funding.</p> <p>²⁸ Mitigation measures lack proper consultation with tribes and consulting parties and are merely speculative as of the date of this Complaint. <i>See</i> ADOT, South Mountain Study Team, <i>Summary</i>, Table S-4, p. S-27 available</p>

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313 (cont.)		As noted on page 4-159 of the Final Environmental Impact Statement, a programmatic agreement is a document that spells out the terms of a formal, legally binding agreement between lead agencies and other interested parties for the proper treatment and management of affected cultural resources. The programmatic agreement establishes a process for consultation, review, and compliance with federal and State preservation laws as the effects of the project on historic properties become known. Although the Advisory Council on Historic Preservation declined to participate in the programmatic agreement, the Council concerned with the development of the agreement (see Table 4-47, which begins on page 4-145 of the Final Environmental Impact Statement).
314	Cultural Resources	Section 106 of the National Historic Preservation Act requires a government-to-government relationship between the Federal Government and Indian tribes as described beginning on page 4-140 of the Final Environmental Impact Statement. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. The consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Register of Historic Places eligibility recommendations (including traditional cultural properties), project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.

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	<p>with certain parties and tribes to address “steps and procedures that would be undertaken to address any effects as they were to become known.”²⁶ The decision to enter into a PA not only removes the project activities from the eyes of the public, but circumvents the statutory requirements and public policy governing the approval process of the project.</p> <p>f. The DEIS fails to confirm that the Tribal Historic Preservation Office has concurred with the FHWA and ADOT’s conclusions on eligibility of all cultural sites against the National Registry’s criterion.</p> <p>The DEIS does not address why the THPO and the GRIC have opted to refrain from concurring on the Section 106 findings. The DEIS should not proceed forward without, in the least, valid Section 106 compliance. The DEIS fails to suggest when concurrence might be reached, why concurrence has not yet been made, and/or any other actions associated with the same.</p> <p>g. The DEIS fails to address proposed mitigation measures to the irreversible harm the Freeway project will cause on known cultural resources.</p> <p>Without addressing the FHWA and ADOT’s planned mitigation of adverse effects upon the known cultural resources, the public, tribes and the Gila River Indian Community remain uninformed and unable to substantively comment on the DEIS. In other words, interested persons are left to speculate on mitigation measures on a large-scale project affecting hundreds of cultural properties. The DEIS does not mention whether it has drafted a mitigation plan, the scope of such a plan, the parties consulted, the measures to be taken, citations to procedural and substantive laws that apply in any such instance, the availability of funding and liability protections, curation agreements, curation space, technical qualifications of on-the-ground archaeologists, curation specialists or assistants, implications and coordination with tribes of any potential implications to the National Graves Protection and Repatriation Act, 25 U.S.C. 3001 et seq.²⁷ The DEIS confirms that the critical procedural requirement of mitigation in the Section 106 process is lacking.²⁸</p> <p>²⁶ <i>Id.</i> at p. 7. The PA received little support from tribes on the record.</p> <p>²⁷ The Native American Graves Protection and Protection Act (“NAGPRA”) requires federal agencies and institutions that receive federal funding to return Native American “cultural items” to lineal descendants and culturally affiliated Indian tribes and Native Hawaiian organizations. Cultural items include human remains, funerary objects, sacred objects, and objects of cultural patrimony. NAGPRA also establishes procedures for the inadvertent discovery or planned excavation of Native American cultural items on federal or tribal lands. While these provisions do not apply to discoveries or excavations on private or state lands, the collection provisions of NAGPRA may apply to Native American cultural items if they come under the control of an institution that receives federal funding.</p> <p>²⁸ Mitigation measures lack proper consultation with tribes and consulting parties and are merely speculative as of the date of this Complaint. See ADOT, South Mountain Study Team, <i>Summary</i>, Table S-4, p. S-27 available</p>
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315	Cultural Resources	Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. The consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Register of Historic Places eligibility recommendations (including traditional cultural properties), project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed. Mitigation for effects to cultural resources is discussed on page 4-146 of the Draft Environmental Impact Statement and in Chapter 5 as <i>Measures to Minimize Harm</i> which are presented at the end of each resource protected under Section 4(f) . These include maintaining access to important sites, the commitment to additional consultation during design, a traditional cultural property evaluation, and others.
316	Cultural Resources	Arizona Department of Transportation and Federal Highway Administration solicited input from the Gila River Indian Community and other Native American tribes and tribal members and considered fully the substantive input and comments that were received. Refer to Chapter 2 in its entirety and text beginning on page 4-128 of the Draft Environmental Impact Statement.
317	Cultural Resources	The Transportation Technical Team was discussed on page 2-3 of the Draft Environmental Impact Statement.

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316	<p>II. The FHWA and ADOT failed to consult the Gila River Indian Community.</p> <p>As a result of the initiation of the project, the GRIC organized itself to effectively plan and negotiate proposed road modifications within the Gila River Indian Reservation. In particular, the GRIC established a Transportation Technical Team (the “TTT”). <i>See</i> Gila River Tribal Resolution GR -76-07 (July 5, 2007).</p> <p>The FHWA and ADOT met with TTT. The TTT held meetings in the Gila River Indian Community’s seven (7) districts. <i>See</i> Table 2-1. As discussed above, FHWA and ADOT do not have authority to delegate its consultation and public/community outreach to tribal government or any of tribal government’s sub-entities. In other words, the FHWA and ADOT failed to make sufficient and direct efforts to engage Community members. Instead, the FHWA and ADOT substituted its duty for community outreach narrowly to tribal government and/or its sub-entities. The result is that Community members are uniformed, uninvolved and insignificant in the participation of the Freeway project. This outcome is contrary to the public policy as set forth in the NEPA.</p> <p>For example, FHWA held only one public hearing on May 21, 2013. On April 30, 2013, FHWA and ADOT explicitly offered transportation assistance through the issuance of the City of Phoenix bus passes to GRIC members to attend the only public hearing on May 21. However, FHWA and ADOT never distributed bus passes to GRIC members that wished to attend the May 21 Hearing. <i>See Statement by Lori Riddle (July 22, 2013)</i>. Therefore, the efforts to engage the Community were disingenuous.</p> <p>III. The DEIS that proposes the selection of the E1 Alternative, the alternative that results in irreversible damage to traditional cultural properties (South Mountain), erroneously concludes that Section 4(f) of the United States Department of Transportation Act of 1996 does not apply and is violative of Environmental Justice.</p> <p>The Department of Transportation Act (DOT Act) of 1966 includes a special provision, Section 4(f), which stipulates that the FHWA and other DOT agencies cannot approve the use of land from publicly owned parks, recreational areas, wildlife and waterfowl refuges, or public and private historical sites unless the following conditions apply: (1) there is no feasible and prudent alternative to the use of land, and (2) the action includes all possible planning to minimize harm to the property resulting from use.</p> <p>Examples of Section 4(f) protected resources are public school playgrounds, public parks, recreational land, wildlife refuges, traditional cultural properties, and historic sites. There are two types of transportation impacts that Section 4(f) looks at direct</p> <hr/> <p>at http://www.azdot.gov/Highways/Valley_Freeways/Loop_202/South_Mountain/PDF/south-mountain-loop-202-docs/EIS/summary/Summary.pdf (viewed July 18, 2013).</p>
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318	Cultural Resources	<p>Section 106 of the National Historic Preservation Act requires a government-to-government relationship between the Federal Government and Indian tribes as described beginning on page 4-140 of the Final Environmental Impact Statement. Section 106 requires that federal agencies take into account the effects of their undertakings on historic properties. This process requires consultation with tribal authorities. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. The consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Register of Historic Places eligibility recommendations (including traditional cultural properties), project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.</p> <p>Public involvement with the Gila River Indian Community was conducted as requested by the tribal government. Prior to October 2005, early efforts to involve the Gila River Indian Community included attending tribal meetings and monthly meetings with Gila River Indian Community Departments (see discussion beginning on page 2-8 of the Draft and Final Environmental Impact Statements). On October 14, 2005, the Gila River Indian Community requested that all project-related communications take place at a government-to-government level (see letter on page A152 of Appendix 1-1). This request was honored by the Arizona Department of Transportation and Federal Highway Administration. All public involvement efforts were implemented by the Gila River Indian Community's public involvement officer.</p> <p>As stated on page 2-8 of the Draft Environmental Impact Statement, the meetings in 2010 between the Gila River Indian Community’s Transportation Technical Team, Arizona Department of Transportation, and the Federal Highway Administration were held in response to a request received from the Governor of the Gila River Indian Community . The information provided to the Transportation Technical Team was used by the Team and the Public Information Office in the Gila River Indian Community’s outreach effort prior to the February 2012 coordinated referendum. The referendum and the outreach effort were tribal actions and, other than providing requested information to the Gila River Indian Community, the Arizona Department of Transportation and Federal Highway Administration did not participate in these actions.</p>
319	Tribal Involvement	<p>The Arizona Department of Transportation provided vouchers for public hearing parking and for public transit to the hearing. For the first time in the State’s history, a shuttle bus to the hearing was provided from six locations in the Phoenix area, including two on the Gila River Indian Community (Komatke Boys & Girls Club and the Governance Center in Sacaton). All advertisements for the hearing provided telephone numbers and electronic contact information regarding information on the shuttle schedules and pick-up locations.</p>

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	<p>II. The FHWA and ADOT failed to consult the Gila River Indian Community.</p> <p>As a result of the initiation of the project, the GRIC organized itself to effectively plan and negotiate proposed road modifications within the Gila River Indian Reservation. In particular, the GRIC established a Transportation Technical Team (the “TTT”). <i>See</i> Gila River Tribal Resolution GR -76-07 (July 5, 2007).</p> <p>The FHWA and ADOT met with TTT. The TTT held meetings in the Gila River Indian Community’s seven (7) districts. <i>See</i> Table 2-1. As discussed above, FHWA and ADOT do not have authority to delegate its consultation and public/community outreach to tribal government or any of tribal government’s sub-entities. In other words, the FHWA and ADOT failed to make sufficient and direct efforts to engage Community members. Instead, the FHWA and ADOT substituted its duty for community outreach narrowly to tribal government and/or its sub-entities. The result is that Community members are uniformed, uninvolved and insignificant in the participation of the Freeway project. This outcome is contrary to the public policy as set forth in the NEPA.</p> <p>For example, FHWA held only one public hearing on May 21, 2013. On April 30, 2013, FHWA and ADOT explicitly offered transportation assistance through the issuance of the City of Phoenix bus passes to GRIC members to attend the only public hearing on May 21. However, FHWA and ADOT never distributed bus passes to GRIC members that wished to attend the May 21 Hearing. <i>See Statement by Lori Riddle (July 22, 2013)</i>. Therefore, the efforts to engage the Community were disingenuous.</p> <p>III. The DEIS that proposes the selection of the E1 Alternative, the alternative that results in irreversible damage to traditional cultural properties (South Mountain), erroneously concludes that Section 4(f) of the United States Department of Transportation Act of 1996 does not apply and is violative of Environmental Justice.</p> <p>The Department of Transportation Act (DOT Act) of 1966 includes a special provision, Section 4(f), which stipulates that the FHWA and other DOT agencies cannot approve the use of land from publicly owned parks, recreational areas, wildlife and waterfowl refuges, or public and private historical sites unless the following conditions apply: (1) there is no feasible and prudent alternative to the use of land, and (2) the action includes all possible planning to minimize harm to the property resulting from use.</p> <p>Examples of Section 4(f) protected resources are public school playgrounds, public parks, recreational land, wildlife refuges, traditional cultural properties, and historic sites. There are two types of transportation impacts that Section 4(f) looks at direct</p> <hr/> <p>at http://www.azdot.gov/Highways/Valley_Freeways/Loop_202/South_Mountain/PDF/south-mountain-loop-202-docs/EIS/summary/Summary.pdf (viewed July 18, 2013).</p>

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320	Section 4(f) and Section 6(f)	<p>The cultural and religious places of importance, like the South Mountains, are acknowledged in the Draft Environmental Impact Statement in several locations, notably pages 4-132 and 5-26.</p> <p>In accordance with the National Environmental Policy Act, a range of reasonable action alternatives to carry forward for further analysis was determined through application of multidisciplinary criteria in a logical, step-wise progression. Alternatives were not disposed of or dismissed without a thorough evaluation using the multidisciplinary criteria outlined in the alternatives development and screening process presented in Chapter 3 of the Draft Environmental Impact Statement. The preferred alternative was the outcome to this process.</p> <p>An alternative on the Gila River Indian Community that could have avoided the South Mountains was considered but eliminated from study after the Gila River Indian Community rejected the alternative by referendum.</p> <p>The Draft Environmental Impact Statement concludes that Section 4(f) does apply to the South Mountains Traditional Cultural Property and Chapter 5 of the Draft Environmental Impact Statement presents a robust and fully disclosed Section 4(f) evaluation (see discussion in the Draft Environmental Impact Statement, starting on page 5-26). The outcome of this process was the determination that there was no prudent and feasible alternative to the E1 Alternative.</p> <p>A thorough feasible and prudent avoidance analysis of the South Mountains was conducted as presented in Chapter 5 of the Draft and Final Environmental Impact Statements and concluded avoidance to the direct use of the resource was not feasible and prudent. In support of this response and given the concerns about the South Mountains, consider the following comment from the U.S. Department of the Interior on the Draft Environmental Impact Statement: “Following our review of the Section 4(f) Evaluation, we concur that there is no feasible or prudent alternative to the Preferred Alternative selected in the document, and that all measures have been taken to minimize harm to these resources.” The complete letter can be found in Appendix 7, Volume III, on page B4 of the Final Environmental Impact Statement.</p>
321	Environmental Justice and Title VI	<p>Since the beginning of the environmental impact statement process, the Federal Highway Administration and Arizona Department of Transportation have been carrying out cultural resources studies and engaging in ongoing, open consultation with the Gila River Indian Community Tribal Historic Preservation Office regarding the identification and evaluation of places of religious and cultural importance to the tribe that may be adversely affected by the proposed freeway. Such places are referred to as traditional cultural properties. As a result of these discussions and of studies conducted by the Gila River Indian Community’s Cultural Resource Management Program, the Gila River Indian Community has identified traditional cultural properties that are eligible for listing in the National Register of Historic Places and that could be affected by construction of the proposed freeway. In</p>

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	<p>II. The FHWA and ADOT failed to consult the Gila River Indian Community.</p> <p>As a result of the initiation of the project, the GRIC organized itself to effectively plan and negotiate proposed road modifications within the Gila River Indian Reservation. In particular, the GRIC established a Transportation Technical Team (the “TTT”). <i>See</i> Gila River Tribal Resolution GR -76-07 (July 5, 2007).</p> <p>The FHWA and ADOT met with TTT. The TTT held meetings in the Gila River Indian Community’s seven (7) districts. <i>See</i> Table 2-1. As discussed above, FHWA and ADOT do not have authority to delegate its consultation and public/community outreach to tribal government or any of tribal government’s sub-entities. In other words, the FHWA and ADOT failed to make sufficient and direct efforts to engage Community members. Instead, the FHWA and ADOT substituted its duty for community outreach narrowly to tribal government and/or its sub-entities. The result is that Community members are uniformed, uninvolved and insignificant in the participation of the Freeway project. This outcome is contrary to the public policy as set forth in the NEPA.</p> <p>For example, FHWA held only one public hearing on May 21, 2013. On April 30, 2013, FHWA and ADOT explicitly offered transportation assistance through the issuance of the City of Phoenix bus passes to GRIC members to attend the only public hearing on May 21. However, FHWA and ADOT never distributed bus passes to GRIC members that wished to attend the May 21 Hearing. <i>See Statement by Lori Riddle (July 22, 2013)</i>. Therefore, the efforts to engage the Community were disingenuous.</p> <p>III. The DEIS that proposes the selection of the E1 Alternative, the alternative that results in irreversible damage to traditional cultural properties (South Mountain), erroneously concludes that Section 4(f) of the United States Department of Transportation Act of 1996 does not apply and is violative of Environmental Justice.</p> <p>The Department of Transportation Act (DOT Act) of 1966 includes a special provision, Section 4(f), which stipulates that the FHWA and other DOT agencies cannot approve the use of land from publicly owned parks, recreational areas, wildlife and waterfowl refuges, or public and private historical sites unless the following conditions apply: (1) there is no feasible and prudent alternative to the use of land, and (2) the action includes all possible planning to minimize harm to the property resulting from use.</p> <p>Examples of Section 4(f) protected resources are public school playgrounds, public parks, recreational land, wildlife refuges, traditional cultural properties, and historic sites. There are two types of transportation impacts that Section 4(f) looks at direct</p> <hr/> <p>at http://www.azdot.gov/Highways/Valley_Freeways/Loop_202/South_Mountain/PDF/south-mountain-loop-202-docs/EIS/summary/Summary.pdf (viewed July 18, 2013).</p>

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321 (cont.)		<p>certain cases, listing these properties on the National Register of Historic Places may offer them protection under Section 4(f) of the Department of Transportation Act.</p> <p>The traditional cultural properties identified are culturally important to other Native American tribes as well. For more discussion of traditional cultural properties, see the section, <i>Cultural Resources</i>, beginning on page 4-140 of the Final Environmental Impact Statement and pages 5-26 through 5-28.</p> <p>The section entitled <i>Title VI and Environmental Justice</i>, beginning on page 4-29 in the Draft Environmental Impact Statement, presents acceptable methods, data, and assumptions to assess the potential for disproportionately high and adverse effects from the proposed action on environmental justice populations and disparate impacts to populations protected under Title VI. Based upon the content of the section, no such effects would result from the action alternatives.</p> <p>In light of comments received on the Draft Environmental Impact Statement, the above-referenced conclusions were confirmed in the preparation of the Final Environmental Impact Statement. To provide further clarity, the discussions of environmental justice and Title VI were separated and additional text explaining the relationship of environmental justice and Title VI to various environmental elements was added throughout Chapter 4, <i>Affected Environment, Environmental Consequences, and Mitigation</i>, as exemplified by the inserted text on page 4-29 of the Final Environmental Impact Statement.</p>
322	Section 4(f) and Section 6(f)	<p>Chapter 5 of the Draft and Final Environmental Impact Statements are dedicated to the discussion of Section 4(f) of the Department of Transportation Act of 1966.</p>
323	Section 4(f) and Section 6(f)	<p>When there is a direct use (take) of a Section 4(f) property, analysis to determine whether proximity impacts would result in a constructive use is not applicable (23 Code of Federal Regulations § 774.15) (see Draft Environmental Impact Statement page 5-27). Constructive use would not incorporate land from the Section 4(f) resource, but has proximity impacts so severe that the protected activities, features, or attributes that qualify a resource for protection under Section 4(f) are substantially impaired. Approximately 32 acres of the over 16,000-acre Phoenix South Mountain Park/Preserve and the South Mountains Traditional Cultural Property would be converted to a transportation corridor. The park would still function as a park, offering recreation, interaction with the Sonoran Desert, etc. Although access to the traditional cultural property would be different, Native Americans would still have access to the traditional cultural property and would still be able engage in traditional activities associated with the mountains. The impact on the traditional cultural property would not jeopardize its eligibility for listing in the National Register of Historic Places. Through the consultation process, the Gila River Indian Community Tribal Historic Preservation Officer has been involved in developing measures to minimize harm to the traditional cultural property (see page 5-27 of the Draft Environmental Impact Statement).</p>

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	<p>impacts: When a 4(f) resource is converted to use for transportation, such as the thirty-one (31) acres of South Mountain for the proposed freeway, as well as a TCP that would be destroyed, if built, indirect impacts including proximity impacts that significantly impair the use of a 4(f) resource are relevant. For example, indirect impacts including proximity impacts could include increased noise levels, changes to views, lighting pollution, or obstructed access to the 4(f) resource (cultural and religious practice). Indirect impacts can intrinsically lead to direct impacts, if the indirect impacts result in the 4(f) resource no longer functioning as it did prior to the Freeway project. This case certainly applies in the present case.</p>
324	<p>The DEIS acknowledges that the South Mountain is sacred to the GRIC and other tribes, is designated as a TCP²⁹, and is consequently eligible under the NRHP. The DEIS indicates that ten locations have been identified by GRIC as places of cultural importance: the South Mountains, two prehistoric village sites, an active shrine site, two prehistoric petroglyph sites, and four prehistoric trail sites, which are eligible as TCPs. The FHWA and ADOT in consultation with the GRIC confirmed the eligibility of two properties. Five TCPs have been identified within the Area of Potential Effects. The DEIS specifically states that the South Mountains were determined eligible for NRHP listing as a TCP under Criteria A and B.³⁰</p>
325	<p>Despite the above findings and conclusions, however, the DEIS suggests that “the E1 Alternative was designed in such a way as to avoid a site that is a contributing element to the South Mountains TCP, resulting in no direct use of this TCP element. A right of way fence would limit access to the site by freeway users, but Community members would continue to gain access to the site as they currently do.”³¹</p>
326	<p>Finally, the DEIS outright finds that, “...even with mitigation, implementation of the proposed action would alter the direct physical connection Community members have between their homeland and the South Mountains and would restrict the ability to visit or use these locations in a traditional cultural manner.” What is most perplexing is that the DEIS makes an unsubstantiated claim that “...alternatives to avoid use of the South Mountains TCP were evaluated and determined to be not prudent and feasible.” In other words, the FHWA and ADOT found the E1 Alternative to be the most prudent and feasible option for the Freeway project.</p>
	<p>²⁹ See ADOT, South Mountain Study Team, <i>Summary</i>, p. 35 available at http://www.azdot.gov/Highways/Valley_Freeways/Loop_202/South_Mountain/PDF/south-mountain-loop-202-docs/EIS/summary/Summary.pdf (viewed July 19, 2013).</p> <p>³⁰ See ADOT, South Mountain Study Team, <i>Summary</i>, p. S-27 available at http://www.azdot.gov/Highways/Valley_Freeways/Loop_202/South_Mountain/PDF/south-mountain-loop-202-docs/EIS/summary/Summary.pdf.</p> <p>³¹ <i>Id.</i></p>

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324	Cultural Resources	The cultural and religious places of importance, like the South Mountains, are acknowledged in the Draft Environmental Impact statement in several locations, notably pages 4-130 and 5-26. Not all of the ten resources identified by the Cultural Resource Management Program as culturally important qualified as traditional cultural properties.
325	Cultural Resources	Comment noted.
326	Section 4(f) and Section 6(f)	<p>In accordance with the National Environmental Policy Act, a range of reasonable action alternatives to carry forward for further analysis was determined through application of multidisciplinary criteria in a logical, step-wise progression. Alternatives were not disposed of or dismissed without a thorough evaluation using the multidisciplinary criteria outlined in the alternatives development and screening process presented in Chapter 3 of the Draft Environmental Impact Statement. The Preferred Alternative was the outcome to this process.</p> <p>The Draft Environmental Impact Statement concludes that Section 4(f) applies to the South Mountains Traditional Cultural Property and Chapter 5 of the Draft Environmental Impact Statement presents a robust and fully disclosed Section 4(f) evaluation (see discussion in the Draft Environmental Impact Statement, starting on page 5-26). The outcome of this process was the determination that there was no prudent and feasible alternative to the E1 Alternative. A thorough feasible and prudent avoidance analysis of the South Mountains was conducted as presented in Chapter 5 of the Draft and Final Environmental Impact Statements and concluded avoidance to the direct use of the resource was not feasible and prudent. In support of this response and given the concerns about the South Mountains, consider the following comment from the U.S. Department of the Interior on the Draft Environmental Impact Statement: “Following our review of the Section 4(f) Evaluation, we concur that there is no feasible or prudent alternative to the Preferred Alternative selected in the document, and that all measures have been taken to minimize harm to these resources.” The complete letter can be found in Appendix 7, Volume III, on page B4 of the Final Environmental Impact Statement.</p>

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327	<p>In addition, the DEIS fails to address the cultural and religious significance of microphylla bursera (elephant tree) also known as “uhs bakam” to Native Americans. The DEIS consequently fails to assess the value of this culturally significant plant as impacted by the proposed project. More specifically, the project proposes to destroy the Bursera Trail and the uhs bakam, used for medicinal and ceremonial purposes, is known to be associated with this particular trail. Elephant tree is a "protected" plant and its presence is rare in the United States. Muhadag (South Mountain) is known to being the plant's northernmost point of location. The more popular location of this plant is in Sonora, Mexico. Local Native Americans are well aware that the only access to harvest Elephant Tree is at Muhadag other than a few remote locations near Yuma, Arizona. The Yuma location requires access via horseback and/or all-terrain vehicle. Reference to uhs bakam must also include technical data support, avoidance and mitigation plans in order to preserve this rare and highly coveted medicine and religious resource. Destroying this particular resource and/or restricting access to it has broad yet serious implications to Native Americans and religious practitioners that rely on this sacred resource.</p>
328	<p>Conclusively, the DEIS has failed to identify at least three Section 4(f) resources. In addition, the DEIS incorrectly analyzes the impact to any Section 4(f) resources in the west end of SMPP. While there will not be a direct use of these trails, there will clearly be a <i>constructive</i> use of these trails. It is tragic that the solitude, peacefulness and beauty experienced on these trails (old and new) will be so dramatically diminished by the proposed action. The severe impacts should be included in a revised DEIS.</p>
329	<p>The Section 4(f) Evaluation is incomplete and filled with misstatements, therefore the analysis is deficient. Figure 5-6 needs to be amended to include the trails and developed measures to minimize harm. As a whole, this report needs to be amended and alternatives reevaluated to avoid impact and/or evaluate measures to minimize harm.</p>
330	<p>As an overall final editorial, it seems tragic that the process went out of its way to realign the proposed project to preserve other Section 4(f) resources (Hudson Farm, Barnes Dairy Farm, and Hackin Farmstead, all on private property) when it is most certain they are only being preserved to be eventually demolished by future development, yet other Section 4(f) resources such as the trails in SMPP, which will be used by thousands of people for many years to come, are discounted, devalued and dismissed as an important protected resource.</p>
331	<p>Many of the statements in the Section 4(f) Evaluation are clearly pre-decisional and the evaluation was not done by or with a professional who understands the SMPP, its trail system or the City of Phoenix General Plan. This leads to a misleading analysis. The public uses the DEIS as a tool for information, yet the information is not only incomplete, it is also wrong. The Section 4(f) Evaluation needs to be revised.</p>

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327	Cultural Resources	<p>Adverse impacts to culturally important natural resources (plants, animals, landscapes) would be addressed through the traditional cultural property mitigation program (currently in its draft form as jointly drafted by the Arizona Department of Transportation and the Gila River Indian Community). (See Draft Environmental Impact Statement pages 4-131 and 5-27 for more discussion.) The Bursera trail is more than ¼ mile from the proposed freeway and is analyzed in the Final Environmental Impact Statement on page 5-9. The trail is within ¼ mile of the planned Chandler extension and residential development; however, these trails do not have noise-sensitive activities or viewshed characteristics that contribute to their importance as Section 4(f) recreational resources.</p>
328	Section 4(f) and Section 6(f)	<p>The newest South Mountains trails, the Bursera and the Pyramid, are more than ¼ mile from the proposed freeway and are analyzed in the Final Environmental Impact Statement on page 5-9. The trails are within ¼ mile of the planned Chandler extension and residential development; however, these trails do not have noise-sensitive activities or viewshed characteristics that contribute to their importance as Section 4(f) recreational resources.</p> <p>Discovery of new information not presented in a Draft Environmental Impact Statement as it is published is not failure. Review by agencies and the public of a Draft Environmental Impact Statement equates to a review of a draft report to aid the agencies in making the document more objective and defensible. In this manner, the realization of new information, if recognized as such by the federal lead agency, permits the Arizona Department of Transportation and its representatives to defensibly augment the document's content.</p>
329	Section 4(f) and Section 6(f)	<p>Trails maps have been updated, and new trails are analyzed in the Final Environmental Impact Statement because they are within ¼ mile of the Chandler Extension (not the proposed freeway) (see page 5-9). Because none of the action alternatives or options would result in direct or constructive use of the trails, no measures to minimize harm are warranted.</p> <p>Discovery of new information not presented in a Draft Environmental Impact Statement as it is published is not failure. Review by agencies and the public of a Draft Environmental Impact Statement equates to a review of a draft report to aid the agencies in making the document more objective and defensible. In this manner, the realization of new information, if recognized as such by the federal lead agency, permits the Arizona Department of Transportation and its representatives to defensibly augment the document's content.</p>
330	Section 4(f) and Section 6(f)	<p>The process upon which Section 4(f) resources were identified and evaluated for feasible and prudent avoidance possibilities followed the rigorous procedural requirements as set forth in Federal Highway Administration Technical Advisory T 6640.8A Guidance for Preparing and Processing Environmental and Section 4(f) Documents and related guidance. The comment suggests trails in the South Mountain Park/Preserve would be subject to direct or constructive use; however, as shown in Chapter 5 of the Draft and Final Environmental Impact Statements, such use would be avoided by the proposed freeway.</p>

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332	<p>The disqualification of trails in South Mountain based on the above assessment is inaccurate, far-reaching and just plain wrong. This shows a true lack of knowledge about the SMPP, the trails, Section 4(f) resources and a defensible analysis. Finally, the assessment of the trails in relation to Native American religious practice is lacking and necessary to weigh the Section 4(f) applicability in the present matter. Thus, the trails remain subject to Section 4(f) review and protection.</p>
333	<p>IV. The DEIS fails to comply with the Archaeological Resources Protection Act of 1979, 16 U.S.C. 470aa-mm.</p> <p>The Archaeological Resource Protection Act (the “ARPA”) was enacted “...to secure, for the present and future benefit of the American people, the protection of archaeological resources and sites which are on public lands and Indian lands, and to foster increased cooperation and exchange of information between governmental authorities, the professional archaeological community, and private individuals.” 16 U.S.C. 470, Sec. 2(b).</p> <p>In the present case, the land affected by the Freeway project includes private, public, tribal and National Park land. ARPA governs federal projects that impact public, tribal and National Park land.³²</p> <p>The DEIS and FHWA/ADOT have failed to demonstrate compliance with the ARPA regarding permits to excavate archaeological resources on such lands, terms and conditions of the permits, compliance with the requisite qualifications of person/s to carry out the permitted activity, notification to tribes, curatorial measures and compliance, custodial arrangements for the archaeological collection, liabilities for the care and maintenance of the collection, compliance with tribal law governing archaeological excavations,³³ compliance with the Antiquities Act of 1906, 16 U.S.C. 431-433, consent of archaeological activities with Indian tribes,³⁴ among other provisions.</p> <p>The FHWA and ADOT should become compliant with the ARPA as the Freeway project, per the DEIS, is planned to adversely impact numerous archaeological sites.</p> <div><p>³² 16 U.S.C. 470bb, Section 3 (3)(a-b) & (4).</p><p>³³ Note that the GRIC has passed resolutions and perhaps other laws that bear the public policy against desecration of the South Mountain. Archaeological excavation would certainly desecrate the South Mountain. The FHWA and ADOT’s lack of compliance with ARPA is compounded by the failure to address ARPA’s requirement to observe tribal law for the same.</p><p>³⁴ See 16 U.S.C. 470bb, Section 5 which states, “[a]ny exchange or ultimate disposition under such regulation of archaeological resources excavated or removed from Indian lands shall be subject to the consent of the Indian or Indian tribe which owns or has jurisdiction over such lands. Following promulgation of regulations under this section, notwithstanding any other provision of law, such regulations shall govern the disposition of archaeological resources removed from public lands and Indian lands pursuant to this Act.”</p></div>

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331	Section 4(f) and Section 6(f)	<p>The Section 4(f) evaluation in its entirety represents an exhaustive, comprehensive, objective, and meaningful effort in accordance with requirements of the law and is in no way misleading. Evaluation of each resource included active engagement of resource owners to clarify resource importance and use (extensive interaction with owner/operators of Section 4(f) resources is well documented in the Appendices of the Draft and Final Environmental Impact Statement). The U.S. Department of the Interior [the agency with direct oversight of Section 4(f)] review of the Draft Environmental Impact Statement noted: “Following our review of the Section 4(f) Evaluation, we concur that there is no feasible or prudent alternative to the Preferred Alternative selected in the document, and that all measures have been taken to minimize harm to these resources” The complete letter can be found in Appendix 7, Volume III, on page B4 of the Final Environmental Impact Statement. The Section 4(f) evaluation was thorough and complete.</p>
332	Section 4(f) and Section 6(f)	<p>The Federal Highway Administration recommended the Native American trails within the project area as eligible for listing in the National Register of Historic Places under Criterion D as archaeological sites. Based on review of the traditional cultural property technical summary, the Bureau of Indian Affairs, City of Phoenix, State Historic Preservation Office, Cocopah Tribe, Colorado River Indian Tribes, Fort McDowell Yavapai Nation, Gila River Indian Community, Hopi Tribe, Navajo Nation, San Carlos Apache Tribe, Tonto Apache Tribe, and White Mountain Apache Tribe, the Gila River Indian Community Tribal Historic Preservation Officer and Arizona State Historic Preservation Office concurred with these recommendations. Trails within Phoenix South Mountain Park/Preserve were not disqualified from Section 4(f) evaluation; they are solely recreational. The City of Phoenix-owned trails within Phoenix South Mountain Park/Preserve were considered collectively as part of the City-owned park/preserve because the analysis indicated that there would be no direct or constructive use of the trails.</p>
333	Cultural Resources	<p>The Draft Environmental Impact Statement complies with the Archaeological Resources Protection Act of 1979, 16 United States Code 470aa-mm. Implementing regulations found at 43 Code of Federal Regulations Section 7.1(a) provide regulations to implement provisions of the Archaeological Resources Protection Act by establishing the uniform definitions, standards, and procedures to be followed by all Federal land managers in providing protection for archaeological resources, located on public lands and Indian lands of the United States; therefore, the Archaeological Resources Protection Act applies only to projects on federal or tribal land. The proposed freeway would not be constructed on tribal land and the involvement of federal land would be limited to a parcel owned by the Bureau of Land Management, which is discussed on page 4-14 of the Final Environmental Impact Statement.</p> <p>As discussed on page 4-159 of the Final Environmental Impact Statement, a programmatic agreement was developed for the project to establish a process for consultation, review, and compliance with federal and state preservation laws as the effects of the project on historic properties become known. The programmatic agreement states that any data recovery on federal lands necessitated by the project must be permitted under the Archaeological Resources Protection Act in accordance with the federal land-holding agency and that in the event any data recovery for the project should take place on tribal lands, all applicable permits would be obtained. Because the project is proposed, a programmatic agreement is in place to address data recovery on federal and tribal lands, and no excavations have yet occurred.</p>

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334	<p>V. The DEIS results in a clear violation of the Religious Freedom Restoration Act of 1993, 42 USC § 2000bb, (the “RFRA”) and the Religious Land Use and Institutionalized Persons Act, 42 U.S.C. § 2000cc et seq. (the “RLUIPA”).</p> <p>In general under the RFRA, the Government shall not substantially burden a person’s exercise of religion even if the burden results from a rule of general applicability, except as provided in subsection (b) of this section. The Government may substantially burden a person’s exercise of religion only if it demonstrates that application of the burden to the person— (1) is in furtherance of a compelling governmental interest; and (2) is the least restrictive means of furthering that compelling governmental interest.</p> <p>The RLUIPA corrects the shortcomings of RFRA by prohibiting the imposition of burdens on the ability of prisoners to worship as they please and gives churches and other religious institutions a way to avoid burdensome zoning law restrictions on their property use.</p> <p>Both RFRA and RLUIPA apply in the present case. The FHWA and ADOT, despite noting substantial findings and a lengthy record of the impact of the Freeway project upon the cultural, traditional and religious practice of Native Americans, the FHWA has not argued nor demonstrated a compelling governmental interest that is the least restrictive means to further such a compelling government interest. Instead, FHWA and ADOT suggest that they originated 30 or more design alternatives yet made unsubstantiated claims that 29 of the alternatives were not prudent or feasible. FHWA and ADOT through its DEIS proposes the E1 Alternative that is (a) a substantial burden to the exercise of religion upon the Native Americans and tribes that have attached a religious connection with the proposed project’s footprint and cultural resources, (b) that FHWA and ADOT intends, through its DEIS to further what it believes is a compelling government interest, and (c) is doing so by electing the most restrictive means upon religious freedom. Therefore, the E1 Alternative for the Freeway project violates RFRA and the project as proposed by the DEIS should not proceed.</p> <p>VI. The United States, through FHWA and ADOT, failed to honor, observe and uphold the United Nations Declaration on the Rights of Indigenous Peoples (the “UNDRIP”) when it issued an insufficient DEIS that does not assure all indigenous people the rights that are afforded them under the Declaration.</p> <p>The 2007 United Nations Declaration of the Rights of Indigenous Peoples (UNDRIP) affirms that Indigenous people have the right to be who they are, that they have the right to exist as distinct peoples, and that they have the right to “maintain, protect and develop the past, present and future manifestations of their cultures.” Further, Indigenous Peoples have the right to “practice and revitalize” their sacred cultural traditions and customs. The UNDRIP affirms the rights of indigenous peoples to “manifest, practice, develop and teach their spiritual and religious traditions, customs and ceremonies,” and “to maintain, protect, and have access in privacy to their religious and cultural sites.” The UNDRIP further</p>
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Code	Issue	Response
334	Cultural Resources	<p>The Religious Land Use and Institutionalized Persons Act, by its terms, has no application here. The Draft Environmental Impact Statement describes a proposed action that, after consultation and coordination efforts, would accommodate and preserve (to the fullest extent possible from the available alternatives) access to the South Mountains for religious practices. A very small portion of the mountain would be impacted by the proposed freeway (less than 0.03 percent of the total area). Although the Draft Environmental Impact Statement describes the impact on the South Mountains as adverse, Native Americans would not be kept from practicing their beliefs, access to the mountain would be maintained, and mitigation measures would be implemented based on input from members of the Gila River Indian Community.</p> <p>Even if a substantial burden existed, the construction of roads to meet regional transportation needs is a central and compelling function of government, and the project is designed to accomplish that compelling function with the least impact possible under the circumstances.</p> <p>The Arizona Department of Transportation and Federal Highway Administration have been fully attentive to concerns expressed by the Gila River Indian Community and reiterate that position in this comment; the agencies have taken these concerns into account in describing potential impacts in the Draft Environmental Impact Statement, in ensuring that access to South Mountain is preserved, and in developing and recommending the implementation of numerous mitigation measures.</p>
335	Cultural Resources	<p>The United States has confirmed that the United Nations Declaration on the Rights of Indigenous Peoples Declaration is “not legally binding or a statement of current international law” and is limited to “moral and political force.” <i>Announcement of U.S. Support for the United Nations Declaration on the Rights of Indigenous Peoples</i>, U.S. State Department (December 17, 2010) (available at: state.gov/documents/organization/154782.pdf). The government’s Announcement further clarified that the United States “understands [that the Declaration] calls for a process of meaningful consultation with tribal leaders, but not necessarily the agreement of those leaders, before the actions addressed in those consultations are taken.” The Draft Environmental Impact Statement describes a proposed action that, after consultation and coordination efforts, would accommodate and preserve (to the fullest extent possible from the available alternatives) access to the South Mountains for religious practices. A very small portion of the mountain would be impacted by the proposed freeway (less than 0.03 percent of the total area). Although the Draft Environmental Impact Statement describes the impact on the South Mountains as adverse, Native Americans would not be kept from practicing their beliefs, access to the mountain would be maintained, and mitigation measures would be implemented based on input from members of the Gila River Indian Community.</p>

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	<p>recognizes that much of what Indigenous peoples hold sacred in this world has been taken or lost “without their free, prior and informed consent or in violation of their laws, traditions and customs,” and it calls for states to provide redress “through effective mechanisms” and “through fair, transparent and effective mechanisms developed in conjunction with indigenous peoples concerned.” The phrase “through effective mechanisms” appears twice in Articles 11 and 12, serving to underscore the fact that nation states should utilize the power of regulatory, legislative and other authorities to assure that the rights of Indigenous peoples to practice and worship in sacred sites and continue religious and cultural ways of living are secure. Article 8 of the UNDRIP specifically prohibits the “forced assimilation or destruction of Indigenous culture.”</p>
336	<p>In the present case, civil rights and human rights within the UNDRIP mandate that an evaluation of the traditional cultural properties be performed with direct, informed with the Indigenous Peoples’ free, prior and informed consent. Here, the Indigenous Peoples are the tribes affected by the Freeway project. Free, prior and informed consent must occur <i>before</i> any route of the proposed project can be selected. Article 7 of the UNDRIP afford Indigenous peoples the right to “decide their own priorities for the process of development as it affects their lives, beliefs, institutions and spiritual well-being and the lands they occupy or otherwise use, and to exercise control over their economic, social and cultural development”. In no way does the UNDRIP sanctify or suggest validity of the FHWA’s incomplete, in accurate and unfounded Section 106 process nor its finding that the proposed Freeway project is exempted from Section 4(f) protections.</p>
337	<p>In other words, FHWA continues to violate the rights afforded to the tribes as the affected Indigenous Peoples in the present matter by proceeding with the E1 Alternative of the Freeway project in the manner so described in the April 2013 DEIS. Further, the United States, through its FHWA in the present matter, is continuing to violate Articles 11&12 by failing to afford civil and human rights outlined in the UNDRIP.</p>
	<p>CONCLUSION</p>
338	<p>The FHWA and ADOT’s proposed South Mountain Freeway project does not meet the requirements of the NEPA, Section 4(f) of the Department of Transportation Act, the NHPA, the ARPA, the RFRA, the RLUIPA, and the UNDRIP. FHWA and ADOT should re-initiate the Section 106 process with reasonable and good faith efforts to consult all tribes and amend any and all technical studies identifying, assessing, evaluating and mitigating adverse impacts to cultural resources with tribal input. Further, FHWA and ADOT should eliminate alternative routes that are located near or through the South Mountain, the Gila River Indian Community and other sites considered of sacred or of cultural significance, correct the DEIS and take future action to become compliant with all applicable laws, ensure that all tribes and Indigenous Peoples are afforded their basic human and civil rights as outlined in the UNDRIP, and appropriately include counsel from air toxicology experts and the findings of the Environmental Protection Agency’s Joint Air Toxic Assessment Project issued in 2005.</p>

Code	Issue	Response
336	Cultural Resources	<p>As described in the Draft Environmental Impact Statement, the consultation process with Native American tribes, and in particular with the Gila River Indian Community, was lengthy, repeated, and extensive. Traditional cultural properties were evaluated through consultation with affected tribes and are described in the Draft Environmental Impact Statement. Although the consent of tribal leaders is not required, as the United States made clear in its decision discussed in an earlier response, the Tribal Historic Preservation Officer concurs with the mitigation measures to be imposed in connection with the E1 Alternative affecting a small portion of the South Mountains.</p> <p>The quoted language in the comment attributed to Article 7 of the Declaration does not appear there. The language appears to derived from the International Labor Organization’s 1989 Indigenous and Tribal Peoples Convention (Convention No. 169). Convention 169 has never been ratified by the United States, which has not agreed to align legislation, policies, and programs with the Convention as a legal requirement.</p> <p>Section 106 of the National Historic Preservation Act requires a government-to-government relationship between the Federal Government and Indian tribes as described beginning on page 4-140 of the Final Environmental Impact Statement Section 106 requires that federal agencies take into account the effects of their undertakings on historic properties. This process requires consultation with tribal authorities. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. The consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Register of Historic Places eligibility recommendations (including traditional cultural properties), project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.</p> <p>A thorough feasible and prudent avoidance analysis of the South Mountains was conducted as presented in Chapter 5 of the Draft and Final Environmental Impact Statements and concluded avoidance to the direct use of the resource was not feasible and prudent. In support of this response, consider the following review from the U.S. Department of the Interior on the Draft Environmental Impact Statement: comment: “Following our review of the Section 4(f) Evaluation, we concur that there is no feasible or prudent alternative to the Preferred Alternative selected in the document, and that all measures have been taken to minimize harm to these resources.” The complete letter can be found in Appendix 7, Volume III, on page B4 of the Final Environmental Impact Statement.</p>
337	Cultural Resources	<p>The Draft Environmental Impact Statement describes a proposed action that, after consultation and coordination efforts, would accommodate and preserve (to the fullest extent possible from the available alternatives) access to the South Mountains for religious practices. A very small portion of the mountain would be impacted by the proposed freeway (less than 0.03 percent of the total area). Although the Draft Environmental Impact Statement describes the impact on the South Mountains as adverse, Native Americans would not be kept from practicing their beliefs, access to the mountain would be maintained, and mitigation measures would be implemented based on input from members of the Gila River Indian Community.</p>

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339	<p>Finally, the National Advisory Council on Historic Preservation should conduct a Council review in accordance with Section 106, 36 C.F.R. §800.8(c)(2) and §800.9 to fully assess the FHWA and ADOT's actions and insufficiencies under the Section 106 process. Further, the Council should have the opportunity to review the abundant record that clearly demonstrates that the agencies failed to carry out their responsibilities assigned under Section 106 and the NEPA. The Council should therefore conduct a detailed case review to improve performance under Section 106 and/or correct the Section 106 and NEPA deficiencies. <i>See Id.</i> Upon findings, the Council may consider a recommendation to issue a stop work order to the Department of Transportation until Section 106 and NEPA compliance is attained.</p>

Code	Issue	Response
338	Cultural Resources	The Draft Environmental Impact Statement is the result of careful study and complies with the National Environmental Policy Act, Section 4(f) of the Department of Transportation Act, the National Historic Preservation Act, the Archaeological Resource Protection Act, the Religious Freedom Restoration Act, the Religious Land Use and Institutionalized Persons Act, and the United Nations Declaration on the Rights of Indigenous Peoples
339	Cultural Resources	As noted in the Final Environmental Impact Statement in Table 4-47 beginning on page 4-145, the National Advisory Council on Historic Preservation has been consulted. The Council declined to participate in the project twice, but encouraged development of a programmatic agreement without its involvement.

Code	Comment Document
	<p>STATEMENT BY LORI RIDDLE JULY 22, 2013</p>
340	<p>There were very few meetings, very little public participation. The very first invite extended was days after the DEIS was released which was April 25th, 2013. The meeting invite was on April 30th, 2013 at 3pm in GRIC at the Governance Center.</p>
341	<p>Present were the TTT, Governor and Lt Governor (who is Chair of the TTT), various tribal departments, a rep from ADOT (who I can't recall), a rep from MAG, Senior Engineer Bob Hazlett as well as a few of the grassroots organizers. Represented were at least organizers from 5 groups. During this meeting we were given 3 copies of the DEIS to divide among our groups. A few days prior a community member attempted to call to find out how to obtain a copy of the DEIS, she was told in order to get a hard copy she would have to pay 50.00 dollars. During the April 30th meeting they also advised us about the 50.00 dollar charge for hard copies. At this meeting they also told us that free bus service to the May 21st DEIS public comment hearing in Phoenix at the Phoenix Convention Center. Details about how the free bus rides to the hearing saying community members could catch the bus in two locations and even take the light rail, but no other details regarding the bus service. They also went through the scenario of what to expect at the hearing, how it would be set up, etc. At the beginning of the meeting the ground rules set as relayed by TTT's David White and Stephen Lewis both individuals head of the TTT. We were not allowed to speak about anything else but what the process was going to be like, at this point there wasn't any mention that the Phoenix hearing would have some differences than the community forums. It was at this meeting where GRIC Lt Gov. had to officially request that a meeting (or two) be held in GRIC for community members that couldn't make the public hearing. At this meeting the handouts "Fact sheet" and "How to participate" were distributed. That's all I can recall.</p> <p>A few times I attempted to call the number provided on the handouts, which also had a recording say the they couldn't receive any more messages, the box was full, or something to that effect. I had also heard similar accounts from other people who were attempting to call the number. On the Thursday before the hearing I started to get worried because there was no further mention of free transport besides what was relayed to us during the April 30th meeting. I called the number provided and was able to have an opportunity to leave a voice message in which I said something to the effect of: Hello my name is Lori Riddle from the Gila River Indian Community and I'm trying to get some further information on bus service, passes or vouchers for my community members. How will this work? Would someone give me a call on my cell #520-610-3405, thank you.</p> <p>No Response!!!!</p> <p>So on the day of the Phoenix hearing May 21st, 2013 I lingered several hours. I only recognized Mr. Bob Hazlett from MAG, I approached Mr. Hazlett and asked him, "So who's in charge here"? He chuckled but didn't answer, I told him I ask because I have some concerns. I told him there's a problem with the number that's always full and can't take anymore new messages, his response, "Yes, we just found out today that it only holds so many messages (I think the number he gave me was 13)". So I told him maybe they need to empty that a few times a day? The other thing I mentioned was that I had left a</p>


Code	Issue	Response
340	Public Involvement	<p>Offers to the Gila River Indian Community Manager to host a public outreach event on the Gila River Indian Community began in summer 2012. The Gila River Indian Community first officially responded to this offer at the April 30, 2013, meeting of the Transportation Technical Team. During this meeting, the Gila River Indian Community Manager requested a Gila River Indian Community Forum be conducted on the Gila River Indian Community following the public hearing. This was the only request the Arizona Department of Transportation received from the Gila River Indian Community regarding whether the Arizona Department of Transportation could hold a public outreach event during the public comment period. The Arizona Department of Transportation agreed to do so, and a Gila River Indian Community Forum was held on June 22, 2013, at the Komatke Boys & Girls Club on the Gila River Indian Community.</p> <p>The Arizona Department of Transportation advertisement efforts of the public hearing and public forums are documented in Chapter 6 of the Final Environmental Impact Statement beginning on page 6-23. The Gila River Indian Community Communication and Public Affairs Office informed the Arizona Department of Transportation that all communication and distribution of informational materials on Gila River Indian Community land would be handled by the Communication and Public Affairs Office. Advertisement text regarding the project, the public comment period, the public hearing, and the various ways for the public to submit comments regarding the South Mountain Freeway Draft Environmental Impact Statement was given to the Gila River Indian Community's Public Information Officer at the Transportation Technical Team meeting on April 30, 2013. Two advertisements regarding the public hearing, information regarding the location and availability of the Draft Environmental Impact Statement, and a map of the alternatives was placed in the May 2013 monthly issue of the <i>Gila River Indian News</i>.</p> <p>The Arizona Department of Transportation Community Relations distributed electronic notices (e-newsletters) through the Gila River Indian Community Government Delivery system to over 12,000 constituents who voluntarily signed up for project alerts along the Interstate 10 (Papago and Maricopa freeways) and State Route 202L (Santan Freeway). These electronic notices included notice of availability of the Draft Environmental Impact Statement (distributed on April 26, 2013); public hearing (distributed on May 10, 2013); the community forums (distributed on May 29, 2013); and closing of the Draft Environmental Impact Statement public comment period (June 2013). In addition, anyone who had attended a previous meeting on the proposed action and signed in received all of this information mailed individually. On May 6, 2013, 73,564 mailers were distributed to addresses within the Study Area.</p>
341	Public Involvement	<p>As stated on page 2-8 of the Draft Environmental Impact Statement, the meetings in 2010 between the Gila River Indian Community's Transportation Technical Team, Arizona Department of Transportation, and the Federal Highway Administration were held in response to a request received from the Governor of the Gila River Indian Community and were not a part of the agency or public scoping process. The information provided to the Transportation Technical Team was used by the Team and the Public Information Office in the Gila River Indian Community's outreach effort prior to the February 2012 coordinated referendum. The referendum and the outreach effort were tribal actions and, other than providing requested information to the Gila River Indian Community, the Arizona Department of Transportation and Federal Highway Administration did not participate in these actions.</p>

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	<p>STATEMENT BY LORI RIDDLE JULY 22, 2013</p> <p>There were very few meetings, very little public participation. The very first invite extended was days after the DEIS was released which was April 25th, 2013. The meeting invite was on April 30th, 2013 at 3pm in GRIC at the Governance Center.</p> <p>Present were the TTT, Governor and Lt Governor (who is Chair of the TTT), various tribal departments, a rep from ADOT (who I can't recall), a rep from MAG, Senior Engineer Bob Hazlett as well as a few of the grassroots organizers. Represented were at least organizers from 5 groups. During this meeting we were given 3 copies of the DEIS to divide among our groups. A few days prior a community member attempted to call to find out how to obtain a copy of the DEIS, she was told in order to get a hard copy she would have to pay 50.00 dollars. During the April 30th meeting they also advised us about the 50.00 dollar charge for hard copies. At this meeting they also told us that free bus service to the May 21st DEIS public comment hearing in Phoenix at the Phoenix Convention Center. Details about how the free bus rides to the hearing saying community members could catch the bus in two locations and even take the light rail, but no other details regarding the bus service. They also went through the scenario of what to expect at the hearing, how it would be set up, etc. At the beginning of the meeting the ground rules set as relayed by TTT's David White and Stephen Lewis both individuals head of the TTT. We were not allowed to speak about anything else but what the process was going to be like, at this point there wasn't any mention that the Phoenix hearing would have some differences than the community forums. It was at this meeting where GRIC Lt Gov. had to officially request that a meeting (or two) be held in GRIC for community members that couldn't make the public hearing. At this meeting the handouts "Fact sheet" and "How to participate" were distributed. That's all I can recall.</p> <p>A few times I attempted to call the number provided on the handouts, which also had a recording say the they couldn't receive any more messages, the box was full, or something to that effect. I had also heard similar accounts from other people who were attempting to call the number. On the Thursday before the hearing I started to get worried because there was no further mention of free transport besides what was relayed to us during the April 30th meeting. I called the number provided and was able to have an opportunity to leave a voice message in which I said something to the effect of: Hello my name is Lori Riddle from the Gila River Indian Community and I'm trying to get some further information on bus service, passes or vouchers for my community members. How will this work? Would someone give me a call on my cell #520-610-3405, thank you.</p> <p>No Response!!!!</p> <p>So on the day of the Phoenix hearing May 21st, 2013 I lingered several hours. I only recognized Mr. Bob Hazlett from MAG, I approached Mr. Hazlett and asked him, "So who's in charge here"? He chuckled but didn't answer, I told him I ask because I have some concerns. I told him there's a problem with the number that's always full and can't take anymore new messages, his response, "Yes, we just found out today that it only holds so many messages (I think the number he gave me was 13)". So I told him maybe they need to empty that a few times a day? The other thing I mentioned was that I had left a</p>

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342	Public Involvement	The initial hotline capacity was 20 messages; it was expanded to 80 on May 17, 2013. Any questions that came in regarding how to participate, including any shuttle bus or transportation questions, were forwarded to one individual to address. Conversation record log sheets were kept for these efforts.
343	Public Involvement	<p>For the first time in the State's history, a shuttle bus to the hearing was provided from six locations in the Phoenix area, including two on the Gila River Indian Community (Komatke Boys & Girls Club and the Governance Center in Sacaton). All advertisements regarding the public hearing provided telephone numbers and electronic contact information regarding information on the shuttle schedules and pick-up locations. Transportation to the Gila River Indian Community forum was not provided.</p> <p>As noted in Chapter 2 of the Final Environmental Impact Statement, efforts to involve the Gila River Indian Community in the environmental impact statement process have been extensive. Public involvement with the Gila River Indian Community was conducted as requested by the tribal government. Prior to October 2005, early efforts to involve the Gila River Indian Community included attending tribal meetings and monthly meetings with Gila River Indian Community Departments (see discussion beginning on page 2-8 of the Draft and Final Environmental Impact Statements). On October 14, 2005, the Gila River Indian Community requested that all project-related communications take place at a government-to-government level (see letter on page A152 of Appendix 1-1). This request was honored by the Arizona Department of Transportation and Federal Highway Administration. All public involvement efforts were implemented by the Gila River Indian Community's public involvement officer.</p>

Code	Comment Document
	<p>message on the number and relayed the message I had left the week prior. After that I said so how was this supposed to work? Because we could have gotten more tribal members present. He shrugged his shoulders and said, "Well it's too late now". Also on the day of the Phoenix hearing the participants received the small booklet "SMTN Meeting Guide". This was the first time we as community members had seen this. The guide did say the community forums were going to be utilizing a different format. It also listed only 1 GRIC forum and listed it as tentative.</p>
344	<p>The meeting in GRIC was short notice fliers went out to the community literally days before the event. Before this event at least three weeks prior one community organizer emailed a request urging GRIC to provide transport to community members to the meeting. There is a lack of community members without vehicles. No response. Lastly a few days before organizers and community voiced their concerns over the inability to voice, in open forum, their concerns at this meeting. We additionally asked again if transport would be provided, they finally said yes, but us organizers had to provide a list of community members who needed transport. This was not expected, it was too short of notice to gather all that information. The day of the GRIC forum were dissatisfied the lack of inability to openly voice their concerns. The video was looped, as posted on ADOT's website, throughout the day.</p>
345	<p>Previously, in two district meetings that I had attended one in district six and the other in district four. There were concerns about ADOT not coming to present the information themselves. The one elder in district six asked who they were working for? He (the elder) stated that he felt like the TTT should not have been presenting the information but ADOT should have been the ones bringing this information to the community. That same consensus was expressed at the district four meeting.</p> <p>Signed,  July 22, 2013</p>

Code	Issue	Response
344	Public Involvement	<p>The Arizona Department of Transportation advertisement efforts of the public hearing and public forums are documented in Chapter 6 of the Final Environmental Impact Statement beginning on page 6-23. The Gila River Indian Community Communication and Public Affairs Office informed the Arizona Department of Transportation that all communication and distribution of informational materials on Gila River Indian Community land would be handled by the Communication and Public Affairs Office. Advertisement text regarding the project, the public comment period, the public hearing, and the various ways for the public to submit comments regarding the South Mountain Freeway Draft Environmental Impact Statement was given to the Gila River Indian Community's Public Information Officer at the Transportation Technical Team meeting on April 30, 2013. Two advertisements regarding the public hearing, information regarding the location and availability of the Draft Environmental Impact Statement, and a map of the alternatives was placed in the May 2013 monthly issue of the <i>Gila River Indian News</i>.</p> <p>The Arizona Department of Transportation Community Relations distributed electronic notices (e-newsletters) through the Gila River Indian Community Government Delivery system to over 12,000 constituents who voluntarily signed up for project alerts along the Interstate 10 (Papago and Maricopa freeways) and State Route 202L (Santan Freeway). These electronic notices included notice of availability of the Draft Environmental Impact Statement (distributed on April 26, 2013); public hearing (distributed on May 10, 2013); the community forums (distributed on May 29, 2013); and closing of the Draft Environmental Impact Statement public comment period (June 2013). In addition, anyone who had attended a previous meeting on the proposed action and signed in received all of this information mailed individually. On May 6, 2013, 73,564 mailers were distributed to addresses within the Study Area.</p>
345	Public Involvement	<p>As noted in Chapter 2 of the Final Environmental Impact Statement, efforts to involve the Gila River Indian Community in the environmental impact statement process have been extensive. Public involvement with the Gila River Indian Community was conducted as requested by the tribal government. Prior to October 2005, early efforts to involve the Gila River Indian Community included attending tribal meetings and monthly meetings with Gila River Indian Community Departments (see discussion beginning on page 2-8 of the Draft Environmental Impact Statement). On October 14, 2005, the Gila River Indian Community requested that all project-related communications take place at a government-to-government level (see letter on page A152 of Appendix 1-1). This request was honored by the Arizona Department of Transportation and Federal Highway Administration. All public involvement efforts were implemented by the Gila River Indian Community's public involvement officer.</p>

Code	Comment Document
	<div><p><u>Additional Comments</u></p><p>One</p><p>Patricia Lawlis Comments on the Draft Environmental Impact Statement (DEIS) for the proposed South Mountain Freeway (SMF), July 2013</p></div>

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346	<p>Comments on the Draft Environmental Impact Statement (DEIS) for the proposed South Mountain Freeway (SMF), July 2013</p> <p>It is the job of the Maricopa Association of Governments (MAG) and the Arizona Department of Transportation (ADOT) to plan for transportation throughout the Valley of the Sun. This includes proper planning for keeping unnecessary traffic out of the valley as well as planning for the proper flow of traffic throughout the area. It also includes planning for moving people around using all modes of transportation, and it should include new and visionary ideas for handling the transportation needs of the valley.</p>
347	<p>Based on the MAG and ADOT mandates, the purpose and need of the South Mountain Freeway (SMF) should be well thought out and based on extensive modeling and analysis. Instead, what we see in the Draft Environmental Impact Statement (DEIS) is the perpetuation of a pre-determined idea from 30 years ago that is neither well thought out nor based on any type of valid modeling and analysis. It is just “we need more freeways,” and this one has been especially designed for trucks to travel through the South Mountain corridor. The fact that the geography of the South Mountain corridor doesn’t support a freeway doesn’t matter. This freeway plan appears to be nothing but a political response to the desires of the trucking industry.</p>
347 348	<p>Purpose and Need (P&N)</p> <p>In fact, the SMF was no visionary idea 30 years ago (DEIS page 1-8). From the very beginning, it was planned as a Phoenix bypass. At that time, the Phoenix metropolitan area was not as spread out as it is now. Yet MAG was supposedly looking at growth patterns and trying to plan for 30 years into the future (which is now). It should have been clear even then that the metropolitan area would spread far beyond the extent of the SMF and that a bypass should be out farther from the core of the city. Pollution was bad enough at that time that planning should have been directed at getting more vehicle pollutants out of the metropolitan area. Yet it wasn’t until much more recently that SR-85 from I-10 at Buckeye to I-8 at Gila Bend to I-10 at Casa Grande was designated as a truck bypass to direct a significant source of pollution out of the city core. And even then, the truck bypass was identified only under pressure from the Environmental Protection Agency (EPA) and the Arizona Department of Environmental Quality (ADEQ). And MAG persisted with claiming a need for the SMF – no longer calling the SMF a truck bypass, but intending that nevertheless. Why should we believe that MAG can do a better job of looking at 30 years into the future now than they could 30 years ago?</p>
349	<p>It is clear from the DEIS, as well as from previous MAG and ADOT statements and actions, that the SMF is intended to be a truck bypass, and that it is currently being disguised as a “regional” highway, which evidently seems to mean that it would be primarily for truck traffic to and from the commercial area around 51st Avenue. The SMF would negate the current truck bypass. An analysis of truck traffic patterns, and</p>

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346		Comment noted.
347	Purpose and Need	Creating a truck bypass is not a goal of the proposed action. The proposed freeway is part of a transportation system developed to improve mobility in the region by increasing capacity and allowing traffic—including truck traffic—to access a segment of the “loop” system (see pages 1-21, 1-22, 3-1, and 3-3 of the Final Environmental Impact Statement) in the Phoenix metropolitan area. The proposed South Mountain Freeway would be a commuter corridor, helping to move local traffic. As with all other freeways in the region, trucks would use it for the through-transport of freight, for transport to and from distribution centers, and for transport to support local commerce. Nevertheless, the primary vehicles using the proposed freeway would be automobiles. The Maricopa Association of Governments regional travel demand model projects that truck traffic would represent approximately 10 percent of the total traffic on the proposed freeway, similar to what is currently experienced on other regional freeways such as Interstate 10, State Route 101L, and U.S. Route 60. As disclosed in the Final Environmental Impact Statement, it is expected that “true” through-truck traffic (not having to stop in the metropolitan area) would continue to use the faster, designated, and posted bypass system of Interstate 8 and State Route 85 (see page 3-64 of the Final Environmental Impact Statement).
348	Purpose and Need	<p>As presented in Chapter 1, <i>Purpose and Need</i>, an objective and unbiased examination of the existing and planned future transportation network in the Study Area was undertaken to determine if the catalyst for the need for the Environmental Impact Statement (being the proposed action) was still warranted. As explained in the chapter, the examination successfully attempted to provide an answer to whether or not a transportation problem(s) exist and would continue to exist in the foreseeable future. The analysis was undertaken in accordance with the National Environmental Policy Act and Federal Highway Administration guidance and policy for implementing the National Environmental Policy Act. The results confirmed the transportation problems as framed in the region’s adopted long range transportation plans (both past and present) still exist and would continue to exist in the foreseeable future. The need for action was not to implement the long range plan objectives but to correct a transportation problem in the region; a beneficial outcome in doing so was consistency with the region’s long range transportation planning activities.</p> <p>The purpose and need criteria used to frame the transportation problem are described (see Figures 1-8, 1-9, 1-10, 1-11, 1-12, and 1-13). As summarized in the section, <i>Conclusions</i>, beginning on page 1-21 of the Draft Environmental Impact Statement, the analysis confirmed that without a major transportation facility in the Study Area, the region’s transportation network (as recognized in over 25 years of transportation planning) will not be able to efficiently move goods and people throughout the region without major investments in the region.</p>
349	Purpose and Need	<p>The Maricopa Association of Governments regional travel demand model projects that truck traffic will represent approximately 10 percent of the total traffic on the proposed action.</p> <p>Chapter 1, <i>Purpose and Need</i>, does not have a truck bypass as a goal of the proposed action. The proposed freeway is part of a transportation system developed to improve mobility in the region by increasing capacity and allowing</p>

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	<p>particularly the shifting of a truck bypass from outside the metropolitan area to an area close to downtown is ignored throughout the DEIS, although such an analysis is also prescribed by the National Environmental Policy Act (NEPA).</p>
350	<p>At one point when funds were short for completing the SMF (early 90s), one idea that ADOT considered was allowing the highway to be built as a toll road. Then, an independent group interested in possibly building this toll road did an analysis of the cost-effectiveness of such a highway (very strongly correlated with the need for the highway). The result of their analysis was that they declined to build the freeway, a clear indication of the lack of need.</p>
351	<p>Rather than dropping the idea of the SMF and re-examining the real needs of the region, MAG and ADOT persisted with the SMF plan.</p>
352	<p>As the CANAMEX highway idea matured, it was designed to go near or through Phoenix. Unless or until I-11 is built, according the CANAMEX website, the CANAMEX would follow I-10, and truckers would certainly find the SMF “short cut” to be most appealing. But ADOT denied the intention of using the SMF for a truck bypass, so they also denied the intention of using it for the CANAMEX. ADOT officially declared that the truck bypass along SR 85 would be a part of CANAMEX. Yet this contradicts assertions on the CANAMEX web site.</p> <p>Of course, truck drivers can read maps and see when a short cut exists for them, so a true analysis of the situation would show the CANAMEX traffic using the SMF, regardless of what the “official” route of the CANAMEX is designated to be. ADOT’s official response to that is that they “can’t help” what truckers do but they expect most of them to use the truck bypass. Really!? Isn’t it a part of their job of planning to provide realistic transportation corridors that will induce the traffic to use the appropriate corridors? And to look at all possible means of transportation to satisfy the entire needs of an area? A proper analysis should definitively show where the traffic, including the truck traffic, would really go.</p> <p>Recently, when ADOT improved SR 85, it became a 4-lane highway, but it was not made a freeway. One motivation for this lack of foresight was apparently because as long as it is not a freeway it cannot be designated as an interstate highway. A freeway bypass could be designated as I-10 and take all pass-through traffic away from the Phoenix metropolitan area. This would serve as a bypass for both truck and automobile traffic. Yet this has apparently never been considered. Or has it been purposely ignored? It is certainly not in the DEIS.</p> <p>The DEIS states (page 5-20) that a tunnel option through South Mountain was rejected because it would limit the ability of trucks hauling hazardous materials to use the SMF. This is just another indication that the SMF is intended as a truck bypass.</p>

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349 (cont.)		<p>traffic—including truck traffic—to access a segment of the “loop” system (see pages 1-21, 1-22, 3-1, and 3-3 of the Final Environmental Impact Statement) in the Phoenix metropolitan area. The proposed South Mountain Freeway would be a commuter corridor, helping to move local traffic. As with all other freeways in the region, trucks would use it for the through-transport of freight, for transport to and from distribution centers, and for transport to support local commerce.</p> <p>Commercial trucks would use the proposed action. As with all other freeways in the Maricopa Association of Governments region, trucks would use it for the through transport of freight, for transport to and from distribution centers, and for transport to support local commerce. And as with travel on all other freeways in the Maricopa Association of Governments region, the primary users of the proposed action would be automobiles.</p> <p>The trucking industry depends on the efficient and fast movement of freight and on travel time savings. Trucking destinations in the Phoenix metropolitan area (either distribution centers or for local commerce) would still need trucks to enter congested areas. Choosing to travel on the proposed action rather than Interstate 10 would not translate to any substantial travel time benefits. Therefore, it is expected that “true” through-truck traffic (not having to stop in the metropolitan area) would continue to use the faster, designated, and posted bypass system of Interstate 8 and State Route 85 (see page 3-64 in the Final Environmental Impact Statement).</p>
350	Alternatives	<p>In 1996, a consortium of private companies proposed to build the South Mountain Freeway as a toll road. The consortium later withdrew its proposal, saying the project was not financially feasible (see Alignment Recommendation South Mountain Corridor Loop 202, as noted on page 1-8 of the Draft Environmental Impact Statement). The determination not to construct the freeway as a toll road was not an indication that the freeway was not needed. In the executive summary to the above referenced report, the proposers state: “The Arizona Transportation Group, LLC still believes that the construction and financing of the South Mountain Portion of the Loop 202 as a toll road is feasible and looks forward to teaming with the Arizona Department of Transportation to provide this important segment of the Maricopa County’s regional highway system.” The reason the proposal was determined to not be financially feasible was because the public and policy-makers were not supportive of paying support tolls.</p>
351	Purpose and Need	<p>Chapter 1, <i>Purpose and Need</i>, examines the purpose and need for the proposed action in terms of defining a transportation problem. In doing so, assumptions associated with past need for the freeway were discounted as part of the environmental impact statement process. The results of the purpose and need analyses included the determination that a transportation problem (similar to the type of problem that has been represented in past Regional Transportation Plans) still exists in the area and that this problem is similar in characteristics to the transportation problem that existed in prior years. The alternatives analyses considered numerous modal alternatives, and it was concluded through a robust screening process that a road facility would best address the transportation problem defined.</p>
352	Trucks	<p>The 1995 Congressional federal definition states:</p> <p>“In the State of Arizona, the CANAMEX Corridor shall generally follow – (i) I-19 from Nogales to Tucson; (ii) I-10 from Tucson to Phoenix; and (iii) United States Route 93 in the vicinity of Phoenix to the Nevada Border.” (Source: <canamex.org/canamex/federal-definition>)</p>

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	<p>particularly the shifting of a truck bypass from outside the metropolitan area to an area close to downtown is ignored throughout the DEIS, although such an analysis is also prescribed by the National Environmental Policy Act (NEPA).</p> <p>At one point when funds were short for completing the SMF (early 90s), one idea that ADOT considered was allowing the highway to be built as a toll road. Then, an independent group interested in possibly building this toll road did an analysis of the cost-effectiveness of such a highway (very strongly correlated with the need for the highway). The result of their analysis was that they declined to build the freeway, a clear indication of the lack of need.</p> <p>Rather than dropping the idea of the SMF and re-examining the real needs of the region, MAG and ADOT persisted with the SMF plan.</p> <p>As the CANAMEX highway idea matured, it was designed to go near or through Phoenix. Unless or until I-11 is built, according the CANAMEX website, the CANAMEX would follow I-10, and truckers would certainly find the SMF “short cut” to be most appealing. But ADOT denied the intention of using the SMF for a truck bypass, so they also denied the intention of using it for the CANAMEX. ADOT officially declared that the truck bypass along SR 85 would be a part of CANAMEX. Yet this contradicts assertions on the CANAMEX web site.</p> <p>Of course, truck drivers can read maps and see when a short cut exists for them, so a true analysis of the situation would show the CANAMEX traffic using the SMF, regardless of what the “official” route of the CANAMEX is designated to be. ADOT’s official response to that is that they “can’t help” what truckers do but they expect most of them to use the truck bypass. Really!? Isn’t it a part of their job of planning to provide realistic transportation corridors that will induce the traffic to use the appropriate corridors? And to look at all possible means of transportation to satisfy the entire needs of an area? A proper analysis should definitively show where the traffic, including the truck traffic, would really go.</p> <p>Recently, when ADOT improved SR 85, it became a 4-lane highway, but it was not made a freeway. One motivation for this lack of foresight was apparently because as long as it is not a freeway it cannot be designated as an interstate highway. A freeway bypass could be designated as I-10 and take all pass-through traffic away from the Phoenix metropolitan area. This would serve as a bypass for both truck and automobile traffic. Yet this has apparently never been considered. Or has it been purposely ignored? It is certainly not in the DEIS.</p> <p>The DEIS states (page 5-20) that a tunnel option through South Mountain was rejected because it would limit the ability of trucks hauling hazardous materials to use the SMF. This is just another indication that the SMF is intended as a truck bypass.</p>
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352 (cont.)		<p>The definition was intentionally left broad so that local, regional, and state agencies could further define the specific routes for the corridor.</p> <p>In April 2001, the Maricopa Association of Governments Regional Council formally adopted the route depicted in the map on page 3-64 as the CANAMEX Corridor within Maricopa County. As noted on page 3-64 of the Draft Environmental Impact Statement, in the Maricopa County area the CANAMEX Corridor is to follow Interstate 10 from Tucson to Interstate 8 near Casa Grande, Interstate 8 west to State Route 85 near Gila Bend, State Route 85 north to Interstate 10 northwest of Buckeye, Interstate 10 west to Wickenburg Road, Wickenburg Road to Vulture Mine Road west of Wickenburg, and then connect with the planned U.S. Route 93/U.S. Route 60 Wickenburg Bypass.</p>
353	Trucks	<p>Arizona highways, as are most highways across the United States, are open to all kinds of traffic, so long as the cargo being carried is in accordance with U.S. Department of Transportation regulations for the specific type of cargo. The South Mountain Freeway, if implemented, is expected to operate under the same rules as other similar facilities in the state; truck traffic would be expected to be permissible (see text box on page 4-157 of the Final Environmental Impact Statement).</p> <p>The <i>Regional Transportation Plan</i> includes provisions for improving State Route 85 north of the Gila River to a freeway-type facility. There is no intention to change the designation of existing Interstate highways through Arizona. The State Route 85/Interstate 8 corridor is signed as the Phoenix bypass and will continue to provide a bypass route.</p> <p>The CANAMEX and Phoenix truck bypass (Interstate 8/State Route 85) routes are not mandatory for truck traffic; they are recommended. The Arizona Department of Transportation does not enforce these routes. It is not anticipated that these routes would be enforced as mandatory in the future. The reader is referred to page 3-64 of the Draft Environmental Impact Statement that elaborates on the relation of truck traffic and the proposed action.</p>
354	Alternatives	<p>The <i>Regional Transportation Plan</i> includes provisions for improving State Route 85 north of the Gila River to a freeway-type facility. There is no intention to change the designation of existing Interstate highways through Arizona. The State Route 85/Interstate 8 corridor is signed as the Phoenix bypass and will continue to provide a bypass route.</p>
355	Alternatives	<p>The noted text is but one of many factors that were used to eliminate the tunnel options through the South Mountains. The text boxes on pages 3-16 and 3-17 of the Draft Environmental Impact Statement discuss the additional factors that weighed as strong negatives for tunnel options: impacts, engineering factors, maintenance costs and issues, security, constructibility, and construction costs. The proposed freeway is part of a transportation system developed to improve mobility in the region by increasing capacity and allowing traffic—including truck traffic—to access a segment of the “loop” system (see pages 1-21, 1-22, 3-1, and 3-3 of the Final Environmental Impact Statement) in the Phoenix metropolitan area. The proposed South Mountain Freeway would be a commuter corridor, helping to move local traffic. As with all other freeways in the region, trucks would use it for the through-transport of freight, for transport to and from distribution centers, and for transport to support local commerce. Nevertheless, the primary vehicles using the proposed freeway would be automobiles. The Maricopa Association of Governments regional travel demand model projects that truck</p>

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356	<p>Perhaps the original intent of the SMF truck bypass was to provide a more convenient route for trucks going in and out of the commercial area around 51st Avenue. Such thinking, however, indicates a decided lack of true regional planning. Any form of valid traffic analysis of the entire region immediately shows that in addition to the CANAMEX traffic, other interstate truck traffic would also prefer this “short cut” to the desirable (in terms of clean air) truck bypass route along SR 85. Any traffic solution that brings more truck traffic through the metropolitan area is not a viable solution. So the SMF is not a viable solution. The truck bypass must stay outside of the metropolitan area.</p>
357	<p>A valid and extensive analysis of the transportation needs of the South Mountain corridor has not been conducted. Such an analysis would show the true needs of local residents (as opposed to induced needs) as well as a detailed breakdown of truck traffic within and through the entire area, including CANAMEX trucks, pass-through trucks, and trucks with an origin and destination (O&D) of the commercial area near 51st Avenue. Such a valid analysis would show that any true need for regional transportation could be at least partly satisfied by modes other than automobile traffic (such as light rail). There is a need for traffic to be able to get in and out of Laveen without having to compete with trucks on the arterial streets, but this could be satisfied by a highway from Laveen to I-10 West. It is the O&D truck needs that require a freeway, but even these needs could be satisfied by a freeway spur from I-10 West to the commercial area around 51st Avenue. The South Mountain corridor is not a viable location for such truck traffic.</p> <p>To be more specific in terms of the DEIS, ADOT justifies the Purpose and Need (P&N) for the construction of the SMF in Chapter 1. There are many specific difficulties with this “justification.”</p> <ol style="list-style-type: none">1. The socio-economic data projections presented in the P&N and elsewhere in the DEIS are faulty. The socio-economic data used in the DEIS was developed by MAG using 2005 census data. When the results of the 2010 U.S. Census results became available, it was obvious that MAG’s forecast of socio-economic data based on the 2005 special Census were too high by a large margin.2. Since socio-economic data are the starting point for the MAG Travel Model, the travel-related forecasts presented in the P&N and elsewhere in the DEIS are faulty. Since MAG plans to update the socio-economic projections, why exactly did ADOT release a DEIS before the updates were ready? Because the changes will be extensive, sufficient time must be allowed for a second review of the DEIS prior to the preparation of the FEIS.3. The forecast of vehicle miles of travel lacks credibility because it is contrary to national trends and also because the methodology used for computation is not explained clearly. Figure 1-4 in the Purpose and Need chapter of the DEIS discusses daily vehicle miles of travel (VMT) at one rate while the Regional Transportation Plan (RTP) uses different data. A further consideration is that travel surveys nationally and in the MAG region indicate

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355 (cont.)		traffic would represent approximately 10 percent of the total traffic on the proposed freeway, similar to what is currently experienced on other regional freeways such as Interstate 10, State Route 101L, and U.S. Route 60; therefore, planning must account for trucks using the proposed freeway.
356	Trucks	<p>The signed truck bypass for the Phoenix metropolitan area is today and will continue to be State Route 85 and Interstate 8. The Maricopa Association of Governments regional travel demand model projects that truck traffic will represent approximately 10 percent of the total traffic on the proposed action.</p> <p>Chapter 1, <i>Purpose and Need</i>, does not have a truck bypass as a goal of the proposed action. The proposed freeway is part of a transportation system developed to improve mobility in the region by increasing capacity and allowing traffic—including truck traffic—to access a segment of the “loop” system (see pages 1-21, 1-22, 3-1, and 3-3 of the Final Environmental Impact Statement) in the Phoenix metropolitan area. The proposed South Mountain Freeway would be a commuter corridor, helping to move local traffic. As with all other freeways in the region, trucks would use it for the through-transport of freight, for transport to and from distribution centers, and for transport to support local commerce.</p> <p>Commercial trucks would use the proposed action (as noted on page 3-64 of the Draft Environmental Impact Statement). As with all other freeways in the Maricopa Association of Governments region, trucks would use it for the through transport of freight, for transport to and from distribution centers, and for transport to support local commerce. And as with travel on all other freeways in the Maricopa Association of Governments region, the primary users of the proposed action would be automobiles.</p> <p>The trucking industry depends on the efficient and fast movement of freight and on travel time savings. Trucking destinations in the Phoenix metropolitan area (either distribution centers or for local commerce) would still need trucks to enter congested areas. Choosing to travel on the proposed action rather than Interstate 10 would not translate to any substantial travel time benefits. Therefore, it is expected that “true” through-truck traffic (not having to stop in the metropolitan area) would continue to use the faster, designated, and posted bypass system of Interstate 8 and State Route 85.</p>
357	Purpose and Need, Alternatives	<p>As presented in Chapter 1, <i>Purpose and Need</i>, of the Draft Environmental Impact Statement, an objective and unbiased examination of the existing and planned future transportation network in the Study Area was undertaken to determine if the catalyst for the need for the Environmental Impact Statement (being the proposed action) was still warranted. As explained in the chapter, the examination successfully attempted to provide an answer to whether or not a transportation problem(s) exist and would continue to exist in the foreseeable future. The analysis was undertaken in accordance with the National Environmental Policy Act and Federal Highway Administration guidance and policy for implementing the National Environmental Policy Act. The results confirmed the transportation problems as framed in the region’s adopted long range transportation plans (both past and present) still exist and would continue to exist in the foreseeable future. This problem is associated with east-west regional mobility in the southwestern region of the Phoenix metropolitan area.</p> <p>The traffic analysis does evaluate the applicability of alternative modes to meet the needs for regional transportation. Figure 3-14 shows that transit enhancements (such as light rail), roadway enhancements (such as more arterial street lanes), and</p>

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	<p>Perhaps the original intent of the SMF truck bypass was to provide a more convenient route for trucks going in and out of the commercial area around 51st Avenue. Such thinking, however, indicates a decided lack of true regional planning. Any form of valid traffic analysis of the entire region immediately shows that in addition to the CANAMEX traffic, other interstate truck traffic would also prefer this “short cut” to the desirable (in terms of clean air) truck bypass route along SR 85. Any traffic solution that brings more truck traffic through the metropolitan area is not a viable solution. So the SMF is not a viable solution. The truck bypass must stay outside of the metropolitan area.</p> <p>A valid and extensive analysis of the transportation needs of the South Mountain corridor has not been conducted. Such an analysis would show the true needs of local residents (as opposed to induced needs) as well as a detailed breakdown of truck traffic within and through the entire area, including CANAMEX trucks, pass-through trucks, and trucks with an origin and destination (O&D) of the commercial area near 51st Avenue. Such a valid analysis would show that any true need for regional transportation could be at least partly satisfied by modes other than automobile traffic (such as light rail). There is a need for traffic to be able to get in and out of Laveen without having to compete with trucks on the arterial streets, but this could be satisfied by a highway from Laveen to I-10 West. It is the O&D truck needs that require a freeway, but even these needs could be satisfied by a freeway spur from I-10 West to the commercial area around 51st Avenue. The South Mountain corridor is not a viable location for such truck traffic.</p> <p>To be more specific in terms of the DEIS, ADOT justifies the Purpose and Need (P&N) for the construction of the SMF in Chapter 1. There are many specific difficulties with this “justification.”</p> <ol style="list-style-type: none">1. The socio-economic data projections presented in the P&N and elsewhere in the DEIS are faulty. The socio-economic data used in the DEIS was developed by MAG using 2005 census data. When the results of the 2010 U.S. Census results became available, it was obvious that MAG’s forecast of socio-economic data based on the 2005 special Census were too high by a large margin.2. Since socio-economic data are the starting point for the MAG Travel Model, the travel-related forecasts presented in the P&N and elsewhere in the DEIS are faulty. Since MAG plans to update the socio-economic projections, why exactly did ADOT release a DEIS before the updates were ready? Because the changes will be extensive, sufficient time must be allowed for a second review of the DEIS prior to the preparation of the FEIS.3. The forecast of vehicle miles of travel lacks credibility because it is contrary to national trends and also because the methodology used for computation is not explained clearly. Figure 1-4 in the Purpose and Need chapter of the DEIS discusses daily vehicle miles of travel (VMT) at one rate while the Regional Transportation Plan (RTP) uses different data. A further consideration is that travel surveys nationally and in the MAG region indicate
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357 (cont.)		<p>system management and demand management strategies could address a portion of the system-wide demand; however, even with these improvements, the proposed freeway would still be a greatly needed element of the overall transportation system.</p> <p>The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future.</p> <p>According to 23 Code of Federal Regulations §771.111(f),” the action evaluated in the environmental impact statement must connect logical termini and be of sufficient length to address environmental matters on a broad scope...”. The proposed action should satisfy the project need and should be considered in the context of the local area socioeconomics and topography, the future travel demand, and other infrastructure improvements in the area. A partial freeway from Interstate 10 (Papago Freeway) to Laveen Village is not feasible because it would not meet the proposed freeway’s identified purpose and need.</p> <p>For a true understanding of origins and destinations of all vehicles, including trucks, that would use the freeway, please refer to Figure 3-18, on Draft Environmental Impact Statement page 3-36. The reader is referred to page 3-64 of the Draft Environmental Impact Statement that elaborates on the relation of truck traffic and the proposed action.</p>
358		See responses to specific comments below.
359	Purpose and Need	<p>The analyses in the Draft Environmental Impact Statement used socioeconomic and traffic projections at the regional analysis zone and traffic analysis zone levels. At the time of publication of the Draft Environmental Impact Statement, Census 2010-based socioeconomic data at the regional analysis zone and traffic analysis zone levels had not been adopted by the Maricopa Association of Governments and were not available to the project team. Therefore, the data used in the Draft Environmental Impact Statement were the most appropriate information available.</p> <p>The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future.</p>
360	Purpose and Need	The comment relies on national trends for travel; however, the local conditions and setting of the Phoenix metropolitan area are not consistent with areas of high-density cities in other parts of the country. In Maricopa County, daily vehicle miles

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361	<p>that travel statistics such as trip length, VMT per person, and VMT per household have been steady over time in recent years, contradicting both the DEIS and the RTP.</p> <p>4. As presented in the DEIS, the P&N defines the need as “completing the Regional Freeway System,” “adding capacity to the regional freeway and arterial system,” and “serving travel needs in the Southwest area.” No compelling need specifically for the SMF is presented. The P&N statement in the DEIS is very general and is focused on the need to add freeway capacity but not focused on building the SMF. The problems identified that lead to the proposed action (not direct quotes) are:</p> <ul style="list-style-type: none">a. Accommodating population and employment growth in the Phoenix Metropolitan Area.b. Completing the Regional Freeway and Highway System, that was delineated about 30 years ago.c. Providing additional freeway capacity to reduce congestion in the Urban Core.d. Serving travel needs in the Southwest portion of the Metropolitan Area. <p>The P&N in the DEIS did not address the compelling problems and needs in the Study Area that the SMF would be intended to alleviate. Specific evaluation criteria should have been developed to assess the effectiveness of each alternative to alleviate, wholly or partially, each of the problems in the Study Area. This lack of specificity in the P&N affects the identification of alternatives and the evaluation of alternatives.</p> <p>5. Some reasonable and feasible alternatives were eliminated early in the screening process. There is no technical or scientific rationale or justification presented as to why the project Study Area comprises the precise area it does. The impression is that these boundaries were drawn for political and procedural reasons to comport with MAG’s and ADOT’s previous planning efforts, rather than to allow a comprehensive, objective NEPA assessment. Specifically, this Study Area appears configured so as to exclude freeway alternatives further south or west and, thus, to deliberately avoid evaluation of other “reasonable alternatives” to the Pecos Road alignment. Although outside of MAG jurisdiction, alternatives in Pinal and Pima Counties should have been given due consideration. The DEIS was not properly scoped.</p> <p>6. The Description of the Proposed Action in the Summary Chapter fails to provide details essential for informed decision-making. The action is described generally as building a freeway in compliance with the RTP.</p> <p>7. Since the evaluation of alternatives is based on the travel forecasts (among other considerations), the evaluations are faulty. As stated in Item 2 above, the travel forecasts, in turn, are faulty because they are based on faulty socio-economic forecasts.</p> <p>8. Some potential impacts, including impacts on the arterial street system adjoining proposed interchanges, construction impacts, and the impacts of</p>
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360 (cont.)		<p>traveled levels increased by almost 2 percent between 2011 and 2012, and the 2012 daily vehicle miles traveled approached the 2007 prerecession peak. (<i>Source:</i> the Arizona Department of Transportation’s Multimodal Planning Division’s Highway Performance Monitoring System Data for calendar years 2012 and 2011).</p> <p>Even if the trend of vehicle miles traveled “per capita” decreasing were to continue, the total vehicle miles traveled in the region would still increase along with increases in total population.</p>
361	Purpose and Need	<p>Analysis of the purpose and need for the proposed action followed National Environmental Policy Act and Federal Highway Administration implementing guidance on the subject matter and used state-of-the-practice analytical tools, as pointed out in Table 1-3, “Traffic Analysis Tools,” on page 1-13 of the Draft Environmental Impact Statement. The results of the analysis determined that a transportation problem does exist and that problem will continue in the foreseeable future (see section, <i>Conclusions</i>, on page 1-21). As noted on page 3-1 in the section, <i>Reconfirm the Purpose and Need for the Proposed Action</i>, a continuous validation process was undertaken throughout the environmental impact statement process to ensure past conclusions in the environmental impact statement process remained valid.</p> <p>The Draft Environmental Impact Statement—particularly in Chapter 1, <i>Purpose and Need</i>, and Chapter 3, <i>Alternatives</i>—thoroughly explains how the process of establishing a purpose and need for the proposed action followed nationally accepted guidance and policy. Examples of how the purpose and need analyses were appropriately applied include the:</p> <ul style="list-style-type: none">• section, <i>Context of Purpose and Need in the EIS Process</i>, on page 1-1• sidebar, “A proposed action’s purpose and documentation should.”, on page 1-1• sidebar, “How are MAG data used in the DEIS?”, on page 1-4• sidebar, “What is the MAG regional demand model?”, on page 1-5• sidebar, “How will the economic downturn affect growth rates?”, on page 1-11• section, <i>Need Based on Regional Transportation Demand and Existing and Projected Transportation System Capacity Deficiencies</i>, beginning on page 1-13• section, <i>Conclusions</i>, on page 1-21• section, <i>Reconfirm the Purpose and Need for the Proposed Action</i>, on page 3-1• section, <i>Responsiveness of the Proposed Freeway to Purpose and Need Criteria</i>, beginning on page 3-27 <p>Figure 1-8, “Average Daily Traffic Volumes on Freeways and Arterial Streets (without the Proposed Action, 2010 and 2035,” illustrates the demands placed on the transportation network in the region. Figure 1-12, “Met and Unmet Demand, 2010 and 2035,” summarizes demand and capacity deficiencies associated with the identified transportation problem.</p> <p>The reader is referred to Draft Environmental Impact Statement Chapter 3, <i>Alternatives</i>, and, specifically, the section, <i>Alternatives Development and Screening Process Conclusions</i>, beginning on page 3-26, noting “... a comprehensive set of alternatives including all modes was considered ... assurance that the screening process was an open process ... a logical, sequential, step-by-step process using data and expertise from multiple disciplines ...” to demonstrate all possibilities were considered.</p>
362	Purpose and Need	<p>The parameters for delineation of the Study Area are described in Chapter 1, <i>Purpose and Need</i>, as the area defining the transportation problem. As presented in the chapter, transportation models were used to determine where the characteristics of the transportation problem would diminish, and, generally, it is</p>

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	<p>that travel statistics such as trip length, VMT per person, and VMT per household have been steady over time in recent years, contradicting both the DEIS and the RTP.</p> <p>4. As presented in the DEIS, the P&N defines the need as “completing the Regional Freeway System,” “adding capacity to the regional freeway and arterial system,” and “serving travel needs in the Southwest area.” No compelling need specifically for the SMF is presented. The P&N statement in the DEIS is very general and is focused on the need to add freeway capacity but not focused on building the SMF. The problems identified that lead to the proposed action (not direct quotes) are:</p> <ol style="list-style-type: none">Accommodating population and employment growth in the Phoenix Metropolitan Area.Completing the Regional Freeway and Highway System, that was delineated about 30 years ago.Providing additional freeway capacity to reduce congestion in the Urban Core.Serving travel needs in the Southwest portion of the Metropolitan Area. <p>The P&N in the DEIS did not address the compelling problems and needs in the Study Area that the SMF would be intended to alleviate. Specific evaluation criteria should have been developed to assess the effectiveness of each alternative to alleviate, wholly or partially, each of the problems in the Study Area. This lack of specificity in the P&N affects the identification of alternatives and the evaluation of alternatives.</p> <p>5. Some reasonable and feasible alternatives were eliminated early in the screening process. There is no technical or scientific rationale or justification presented as to why the project Study Area comprises the precise area it does. The impression is that these boundaries were drawn for political and procedural reasons to comport with MAG’s and ADOT’s previous planning efforts, rather than to allow a comprehensive, objective NEPA assessment. Specifically, this Study Area appears configured so as to exclude freeway alternatives further south or west and, thus, to deliberately avoid evaluation of other “reasonable alternatives” to the Pecos Road alignment. Although outside of MAG jurisdiction, alternatives in Pinal and Pima Counties should have been given due consideration. The DEIS was not properly scoped.</p> <p>6. The Description of the Proposed Action in the Summary Chapter fails to provide details essential for informed decision-making. The action is described generally as building a freeway in compliance with the RTP.</p> <p>7. Since the evaluation of alternatives is based on the travel forecasts (among other considerations), the evaluations are faulty. As stated in Item 2 above, the travel forecasts, in turn, are faulty because they are based on faulty socioeconomic forecasts.</p> <p>8. Some potential impacts, including impacts on the arterial street system adjoining proposed interchanges, construction impacts, and the impacts of</p>

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362 (cont.)		<p>at these locations where the definition of the Study Area took shape. This effort was coordinated with stakeholder agencies, including the U.S. Environmental Protection Agency.</p> <p>Alternatives considered in the Draft Environmental Impact Statement included many that were located outside of the Study Area. Examples include the Riggs Road Alternative (see page 3-9), the State Route 85/Interstate 8 Alternative (see page 3-9), the U.S. Route 60 Extension (see page 3-12), the Interstate 10 Spur (see page 3-12), and the Central Avenue Tunnel (see page 3-12).</p>
363	Purpose and Need	<p>As pointed out on page S-1, in the sidebar, “<i>What you will find in the Summary chapter,</i>” the text in the Summary is not the “final word,” and readers are urged to turn to the main text when questions about Summary content arise. While proposed action is summarily defined on page 1-1 of the Draft Environmental Impact Statement as the “construction and operation of a major transportation facility,” design specifics for each action alternative are found in text beginning on page 3-40 of the Final Environmental Impact Statement. Sufficient detail is provided to: ensure meaningful comparison and analyses of the alternatives in reference to operational characteristics, cost, and impacts; and to convey to sufficient information to reviewers of the characteristics of each alternative in accordance with 23 Code of Federal Regulations 771 Environmental Impact and Related Procedures or in the Federal Highway Administration Technical Advisory T 6640.8A Guidance for Preparing and Processing Environmental and Section 4(f) Documents.</p> <p>It is clear, as pointed out in Chapter 3, <i>Alternatives</i>, that a beneficial outcome of the alternatives screening process—a “... logical, sequential, step-by-step process using data and expertise from multiple disciplines ... (page 3-27)” —was that the mode determined to be appropriate for addressing the identified transportation problem was a highway that, in turn, was consistent with local and regional plans (as supported by stakeholder jurisdictions). But nowhere in the Draft Environmental Impact Statement is reference made that the proposed action is needed to comply with the <i>Regional Transportation Plan</i>. The analysis of the proposed action’s purpose and need would have ended the environmental impact statement process at that point if a need in the form of a transportation problem had not been identified, and this is disclosed in the Draft Environmental Impact Statement.</p>
364	Purpose and Need	<p>The analyses in the Draft Environmental Impact Statement used socioeconomic and traffic projections at the regional analysis zone and traffic analysis zone levels. At the time of publication of the Draft Environmental Impact Statement, Census 2010-based socioeconomic data at the regional analysis zone and traffic analysis zone levels had not been adopted by the Maricopa Association of Governments and were not available to the project team. Therefore, the data used in the Draft Environmental Impact Statement were the most appropriate information available.</p> <p>The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future.</p>

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366	<p>truck traffic are not addressed at all or are not addressed in detail sufficient for a DEIS for an Action Alternative (as opposed to a programmatic action such as the adoption of the RTP).</p> <p>9. None of the Action Alternatives would alleviate the anticipated capacity deficiencies identified in the P&N. Despite the expenditure of about \$3 billion to build the SMF and despite the displacement of many residences and business establishments, there would be capacity deficiencies at levels comparable to the No Action Alternative on freeways and arterials throughout the metropolitan area and on the SMF itself. While the levels of congestion may be slightly less, Level of Service E and F conditions would prevail at approximately the same levels and durations in 2035 with or without an Action Alternative.</p>
367	<p>10. Appropriate mitigation measures were not proposed to mitigate the impacts of the Action Alternatives. Assuming for discussion purposes that the Preliminarily Preferred Action Alternative is implemented, appropriate mitigation measures should have been in the EIS. Some appropriate mitigation measures would have included:</p> <ul style="list-style-type: none">• Placement of truck weight limits on the SMF• Restricting trucks carrying hazardous materials (hazmats) from using the SMF• Upgrading the currently-designated CANAMEX Route via I-10/I-8/SR-85/I-10 to full freeway standards• Development of an east-west truck route to by-pass the Phoenix metropolitan area• Formulation and inclusion in the RTP of a plan for arterials in the Southwest area to help guide development patterns so that desirable options are not precluded <p>11. Based on these traffic and circulation considerations, none of the Action Alternatives should be selected as the Preliminarily Preferred Alternative.</p> <p>A specific NEPA violation we found in the DEIS is that the route for the SMF has been predetermined practically since its inception. Even in the 1985 Maricopa Elections materials the "Southwest Loop" is shown with the Pecos Road and 59th Avenue alignments east and west. Since that time millions of dollars have been spent purchasing right-of-way along these alignments, yet nothing has been spent on any other alternative alignments, including the Loop 101 alignment recommended by the SMCAT (and rejected by MAG) and the 71st Avenue alignment. Both of these western alternatives are supposedly still being considered, but it is clear that they are not really considered alternatives.</p> <p>Additionally, in 1998, the tribal government of the Gila River Indian Community (GRIC) approved a route for the SMF along Riggs Road on tribal land when it adopted the Gila Borderlands Regional Planning Study (Arizona Republic, 1998 plan</p>

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365	Traffic	The proposed freeway would include improvements along arterial streets at interchange locations to facilitate the movement of traffic on, off, and across the freeway. The arterial street improvements are included within the right-of-way footprint used for the analysis of impacts.
366	Traffic	<p>The traffic operational characteristics comparison between the action and No-Action alternatives is presented beginning on page 3-27 of the Final Environmental Impact Statement. The analysis shows that the action alternatives would:</p> <ul style="list-style-type: none">• reduce overall traffic on the arterial street system (see Figures 3-12 and 3-13)• optimize travel on the region's freeway system (see Figure 3-12)• reduce the capacity deficiency to levels better than experienced today (see Figures 1-12 and 3-14)• reduce the duration of level of service E or F conditions in key areas of the region's freeway system (see Figure 3-15)• improve travel times on trips within the Study Area and across the region (see Figure 3-17 and Table 3-8)• provide improved regional mobility for areas projected to experience growth in the next 25 years (see Figures 1-7 and 3-18) <p>When all of this is considered in the realm of travel time savings for motorists in the region, the user benefits approximate \$200 million per year (see Table 4-26).</p>
367	Hazardous Materials	<p>The obligation of the Arizona Department of Transportation and Federal Highway Administration, as the federal lead agency, in accordance with the National Environmental Policy Act is to assess if the proposed action and its alternatives would lead to significant adverse environmental impacts, disclose those impacts and identify mitigation to reduce the impact below a level of significance (and if such mitigation is unavailable, disclose that such an impact would occur but not be mitigated). Sufficient mitigation under these terms is presented throughout Chapters 3, 4 and 5 of the Draft Environmental Impact Statement. In terms of suggested mitigation examples in the comment, consider:</p> <ul style="list-style-type: none">• As it relates to transport of hazardous materials, Arizona highways, as are most highways across the United States, are open to all kinds of traffic, so long as the cargo being carried is in accordance with U.S. Department of Transportation regulations for the specific type of cargo. The South Mountain Freeway, if implemented, is expected to operate under the same rules as other similar facilities in the state; truck traffic would be expected to be permissible (see text box on page 4-157 of the Final Environmental Impact Statement).• Improvements to State Route 85 are included in the <i>Regional Transportation Plan</i>, and the plan is to continue to improve this corridor until it is completely access-controlled with a freeway section north of the Gila River.• The <i>Regional Transportation Plan</i> is not the primary source of funding for expansion of the arterial street system. Funding for the arterial street system generally comes from the local jurisdiction or through impact fees for development. It is anticipated that the arterial street network within the Study Area will be expanded in this same manner. The Maricopa Association of Governments regional travel demand model includes assumptions related to arterial street expansion based on local jurisdictions' general planning. In the case of the Study Area, it is assumed that most of the arterial street network would be built out by 2035.

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	<p>truck traffic are not addressed at all or are not addressed in detail sufficient for a DEIS for an Action Alternative (as opposed to a programmatic action such as the adoption of the RTP).</p> <p>9. None of the Action Alternatives would alleviate the anticipated capacity deficiencies identified in the P&N. Despite the expenditure of about \$3 billion to build the SMF and despite the displacement of many residences and business establishments, there would be capacity deficiencies at levels comparable to the No Action Alternative on freeways and arterials throughout the metropolitan area and on the SMF itself. While the levels of congestion may be slightly less, Level of Service E and F conditions would prevail at approximately the same levels and durations in 2035 with or without an Action Alternative.</p> <p>10. Appropriate mitigation measures were not proposed to mitigate the impacts of the Action Alternatives. Assuming for discussion purposes that the Preliminarily Preferred Action Alternative is implemented, appropriate mitigation measures should have been in the EIS. Some appropriate mitigation measures would have included:</p> <ul style="list-style-type: none">• Placement of truck weight limits on the SMF• Restricting trucks carrying hazardous materials (hazmats) from using the SMF• Upgrading the currently-designated CANAMEX Route via I-10/I-8/SR-85/I-10 to full freeway standards• Development of an east-west truck route to by-pass the Phoenix metropolitan area• Formulation and inclusion in the RTP of a plan for arterials in the Southwest area to help guide development patterns so that desirable options are not precluded <p>11. Based on these traffic and circulation considerations, none of the Action Alternatives should be selected as the Preliminarily Preferred Alternative.</p> <p>368</p> <p>369</p> <p>A specific NEPA violation we found in the DEIS is that the route for the SMF has been predetermined practically since its inception. Even in the 1985 Maricopa Elections materials the "Southwest Loop" is shown with the Pecos Road and 59th Avenue alignments east and west. Since that time millions of dollars have been spent purchasing right-of-way along these alignments, yet nothing has been spent on any other alternative alignments, including the Loop 101 alignment recommended by the SMCAT (and rejected by MAG) and the 71st Avenue alignment. Both of these western alternatives are supposedly still being considered, but it is clear that they are not really considered alternatives.</p> <p>Additionally, in 1998, the tribal government of the Gila River Indian Community (GRIC) approved a route for the SMF along Riggs Road on tribal land when it adopted the Gila Borderlands Regional Planning Study (Arizona Republic, 1998 plan</p>
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368	Alternatives	<p>The Arizona Department of Transportation, with concurrence from the Federal Highway Administration, has determined that the proposed freeway (as made up by the W59 and E1 Alternatives) is the preferred solution to the transportation problem identified in the Draft Environmental Impact Statement. However, all alternatives discussed in the Draft and Final Environmental Impact Statement, including the No-Action Alternative, are still under consideration. The selection of an alternative will be made in a record of decision issued by the Federal Highway Administration for the proposed project.</p> <p>All of the alternatives were subjected to a thorough evaluation using a multidisciplinary set of criteria in accordance with National Environmental Policy Act and federal Highway Administration guidance.</p>
369	Alternatives	<p>The comment suggests the environmental impact statement process was biased by a history of property acquisitions within the Study Area. More specifically, properties falling within the limits of the Preferred Alternative, as identified in the Final Environmental Impact Statement, were targeted for acquisition.</p> <p>As noted in text on page 3-54 of the Final Environmental Impact Statement, the Arizona Department of Transportation began acquiring land for the original alignment in 1988. Between 1988 and 2001, the Arizona Department of Transportation acquired approximately 293 acres. Most of this land (258 acres) is located in the Eastern Section along Pecos Road. In 2006, the Arizona Department of Transportation began protective and hardship land acquisition in the alignment right-of-way footprint for the W59 and E1 Alternatives. Between 2006 and October 2013, the Arizona Department of Transportation purchased 326 acres (303 in the Western Section and 23 in the Eastern Section).</p> <p>The process for hardship and advanced acquisitions is explained in text on page 4-50 of the Final Environmental Impact Statement.</p> <p>The comment infers that by taking such action, the objective equal consideration of the alternatives studied in detail in the Draft and Final Environmental Impact Statements is tainted. Advanced acquisitions in parallel to a National Environmental Policy Act environmental determination process is not unprecedented and is common practice. In this case, property acquisitions by the Arizona Department of Transportation for purposes of implementing the proposed action are done at risk as communicated to the agency by the Federal Highway Administration. If another action alternative were to be ultimately selected, the agency would likely have to place the acquired properties on the market for sale and purchase. The Arizona Department of Transportation attempts to balance the risk against its mission of timely delivery of transportation infrastructure to the driving public. Further, Federal Highway Administration regulations do not allow the ownership of right-of-way to be a factor in the decision regarding the selection of an alternative.</p> <p>While the South Mountain Citizens Advisory Team recommended the W101 Alternative, all stakeholders' input was accounted for—including regional leaders, municipalities, members of the public, and members of the South Mountain Citizens Advisory Team—before identifying the W59 Alternative as the Preferred Alternative (see Draft Environmental Impact Statement pages 3-65 and 3-68).</p> <p>Both Riggs Road and Queen Creek Road Alternatives were considered (see Figure 3-5 on page 3-7 of the Final Environmental Impact Statement). While these alternatives might serve regional mobility needs, particularly of those living in the Maricopa area, meeting this travel demand would not address specific planning goals for an</p>

(Response 369 continues on next page)

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370	<p>for South Mountain Freeway passed over, March 25, 2013). Three years later, the state moved on with its SMF plan, without considering the GRIC plan. At another time, the GRIC proposed a Queen Creek Road alignment (Arizona Republic, <i>Tribe Against South Mountain Freeway on land – for now</i>, January 20, 2010). This proposal was also rejected by ADOT.</p> <p>Throughout the DEIS, and throughout the time leading up to the publication of the DEIS, the inappropriate restrictions on the scoping of the study precluded the consideration of viable alternatives to the SMF. With the apparent need for a freeway that could handle considerable truck traffic, including hazmats, the natural consideration would have been the route that is currently the “Phoenix truck bypass” – SR-85 from I-10 at Buckeye to I-8 at Gila Bend to I-10 at Casa Grande. This route could become the I-10 and provide a bypass for all pass-through traffic, including the CANAMEX traffic. With appropriate access provided from the commercial area around 51st Avenue, it could also provide a main route for O&D traffic. It should at least be considered as an alternative. The planned route for I-11, looping southwest from I-10 west of downtown Phoenix, through Rainbow Valley, then rejoining I-10 near Casa Grande, should also be a considered alternative. It could accommodate all the truck traffic bypassing Phoenix with a shorter route than the current truck bypass. If the primary reason for wanting the SMF is to accommodate O&D truck traffic (although this is not stated in the DEIS, it is easy to come to this conclusion from what is stated), another alternative that should be considered is to create a freeway spur from I-10 West and/or from the real truck bypass into the commercial area around 51st Avenue.</p> <p>The point is that viable alternatives to the SMF exist, but the SMF is not a viable alternative itself. No amount of attempting to exclude alternatives through inappropriate scoping will make the SMF viable. If the need exists for accommodating truck traffic, several alternatives are available for consideration. ADOT should start over, state the real P&N, and produce a reasonable DEIS. This DEIS is fatally flawed, at least in part because the true P&N are disguised to try to force a non-viable solution.</p> <p>Air Quality</p> <p>The modeling of air pollution impacts in the DEIS do not include the issues involved with truck traffic. There are 3 specific “classes” of truck traffic that should have been considered:</p> <ol style="list-style-type: none">1. Pass-through traffic that now uses the official truck bypass2. CANAMEX traffic3. Origination and Destination (O&D) traffic to/from the commercial area around 51st Avenue <p>Many years ago, the idea of a truck bypass came up because there were chronic issues about air quality in the Phoenix metro area. The air quality was so bad and for</p>

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369 (cont.)		integrated regional transportation network. The <i>Regional Transportation Plan</i> identifies the proposed South Mountain Freeway as a critical link in the Regional Freeway and Highway System. These alternatives would not complete the Phoenix metropolitan area’s loop system as part of State Route 202L, thereby causing substantial out-of-direction travel for motorists. Therefore, the Riggs Road and Queen Creek Road Alternatives would not meet the project’s purpose and need criteria and were eliminated from further study.
370	Trucks	<p>The environmental impact statement process was undertaken in accordance with National Environmental Policy Act and related legislation. As explained throughout these responses, Chapter 1, <i>Purpose and Need</i>, of the Draft Environmental Impact Statement does not have a truck bypass as a goal of the proposed action. These comments continuously and erroneously suggest that the only purpose of the proposed action is to serve truck traffic; however, none of the traffic analysis presented in the Draft and Final Environmental Impact Statements or elsewhere supports this contention.</p> <p>The proposed freeway is part of a transportation system developed to improve mobility in the region by increasing capacity and allowing traffic—including truck traffic—to access a segment of the “loop” system (see pages 1-21, 1-22, 3-1, and 3-3 of the Final Environmental Impact Statement) in the Phoenix metropolitan area. The proposed South Mountain Freeway would be a commuter corridor, helping to move local traffic. As with all other freeways in the region, trucks would use it for the through-transport of freight, for transport to and from distribution centers, and for transport to support local commerce. The Maricopa Association of Governments travel demand model projects trucks will represent approximately 10 percent of the total traffic on the proposed freeway (this would equate to approximately 15,000 trucks per day based on an average total daily volume of 150,000 vehicles). See Figure 3-18, on page 3-36 of the Draft Environmental Impact Statement, for information related to use of the freeway.</p> <p>Other existing facilities (such as State Route 85 and Interstate 8) and future facilities (such as Interstate 11) serve a specific purpose of providing a truck route. These facilities would not address the need identified for the proposed action. Therefore, they are not appropriate responses and were eliminated from consideration.</p> <p>The signed truck bypass for the Phoenix metropolitan area is today and will continue to be State Route 85 and Interstate 8. The Maricopa Association of Governments regional travel demand model projects that truck traffic will represent approximately 10 percent of the total traffic on the proposed action. The reader is referred to page 3-64 of the Draft Environmental Impact Statement that elaborates on the relation of truck traffic and the proposed action.</p> <p>According to 23 Code of Federal Regulations §771.111(f),” the action evaluated in the environmental impact statement must connect logical termini and be of sufficient length to address environmental matters on a broad scope...”. The proposed action should satisfy the project need and should be considered in the context of the local area socioeconomics and topography, the future travel demand, and other infrastructure improvements in the area. A partial freeway from Interstate 10 (Papago Freeway) to Laveen Village is not feasible because it would not meet the proposed freeway’s identified purpose and need.</p>

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	<p>for South Mountain Freeway passed over, March 25, 2013). Three years later, the state moved on with its SMF plan, without considering the GRIC plan. At another time, the GRIC proposed a Queen Creek Road alignment (Arizona Republic, <i>Tribe Against South Mountain Freeway on land – for now</i>, January 20, 2010). This proposal was also rejected by ADOT.</p> <p>Throughout the DEIS, and throughout the time leading up to the publication of the DEIS, the inappropriate restrictions on the scoping of the study precluded the consideration of viable alternatives to the SMF. With the apparent need for a freeway that could handle considerable truck traffic, including hazmats, the natural consideration would have been the route that is currently the “Phoenix truck bypass” – SR-85 from I-10 at Buckeye to I-8 at Gila Bend to I-10 at Casa Grande. This route could become the I-10 and provide a bypass for all pass-through traffic, including the CANAMEX traffic. With appropriate access provided from the commercial area around 51st Avenue, it could also provide a main route for O&D traffic. It should at least be considered as an alternative. The planned route for I-11, looping southwest from I-10 west of downtown Phoenix, through Rainbow Valley, then rejoining I-10 near Casa Grande, should also be a considered alternative. It could accommodate all the truck traffic bypassing Phoenix with a shorter route than the current truck bypass. If the primary reason for wanting the SMF is to accommodate O&D truck traffic (although this is not stated in the DEIS, it is easy to come to this conclusion from what is stated), another alternative that should be considered is to create a freeway spur from I-10 West and/or from the real truck bypass into the commercial area around 51st Avenue.</p> <p>371 The point is that viable alternatives to the SMF exist, but the SMF is not a viable alternative itself. No amount of attempting to exclude alternatives through inappropriate scoping will make the SMF viable. If the need exists for accommodating truck traffic, several alternatives are available for consideration. ADOT should start over, state the real P&N, and produce a reasonable DEIS. This DEIS is fatally flawed, at least in part because the true P&N are disguised to try to force a non-viable solution.</p> <p>372 Air Quality</p> <p>The modeling of air pollution impacts in the DEIS do not include the issues involved with truck traffic. There are 3 specific “classes” of truck traffic that should have been considered:</p> <ol style="list-style-type: none">1. Pass-through traffic that now uses the official truck bypass2. CANAMEX traffic3. Origination and Destination (O&D) traffic to/from the commercial area around 51st Avenue <p>Many years ago, the idea of a truck bypass came up because there were chronic issues about air quality in the Phoenix metro area. The air quality was so bad and for</p>

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370 (cont.)		<p>For a true understanding of origins and destinations of all vehicles, including trucks, that would use the proposed freeway, please refer to Figure 3-18 on page 3-36 of the Draft Environmental Impact Statement.</p> <p>Public and agency scoping is discussed in Chapter 6 of the Draft Environmental Impact Statement. As discussed in Chapter 6, these scoping efforts were extensive.</p>
371	Purpose and Need	<p>The Draft Environmental Impact Statement and the environmental impact statement process it documents represent a robust, comprehensive, objective, defensible implementation of National Environmental Policy Act guidance, intent, and spirit. The Draft Environmental Impact Statement—particularly in Chapter 1, <i>Purpose and Need</i>, and Chapter 3—<i>Alternatives</i>, thoroughly explains how the process of establishing a purpose and need for the proposed action followed nationally accepted guidance and policy. Examples of how the purpose and need analyses were appropriately applied include the:</p> <ul style="list-style-type: none">• section, <i>Context of Purpose and Need in the EIS Process</i>, on page 1-1• sidebar, “<i>A proposed action’s purpose and documentation should:</i>”, on page 1-1• sidebar, “<i>How are MAG data used in the DEIS?</i>”, on page 1-4• sidebar, “<i>What is the MAG regional demand model?</i>”, on page 1-5• sidebar, “<i>How will the economic downturn affect growth rates?</i>”, on page 1-11• section, <i>Need Based on Regional Transportation Demand and Existing and Projected Transportation System Capacity Deficiencies</i>, beginning on page 1-13• section, <i>Conclusions</i>, on page 1-21• section, <i>Reconfirm the Purpose and Need for the Proposed Action</i>, on page 3-1• section, <i>Responsiveness of the Proposed Freeway to Purpose and Need Criteria</i>, beginning on page 3-27 <p>In short, assessment of the purpose and need for the proposed action and consideration of alternatives were undertaken in an objective, defensible manner in accordance with National Environmental Policy Act guidance and intent; past South Mountain Freeway-related determinations were accounted for as only criteria in a multitiered, multidisciplinary screening process (see the sections, <i>Conclusions</i>, on pages 1-21 and 3-70. Table 3-9, “Implementation of the Proposed Freeway as the Appropriate Modal Alternative to Satisfy Purpose and need Criteria, 2035,” further presents information supporting the conclusion.</p> <p>No mention is made of the purpose and need of the proposed action being to serve as a truck bypass. Information pertaining to truck routes in the region is presented on page 3-64 of the Draft Environmental Impact Statement, in the text box, “<i>Trucking in the MAG Region.</i>”</p> <p>The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future.</p>

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	<p>for South Mountain Freeway passed over, March 25, 2013). Three years later, the state moved on with its SMF plan, without considering the GRIC plan. At another time, the GRIC proposed a Queen Creek Road alignment (Arizona Republic, <i>Tribe Against South Mountain Freeway on land – for now</i>, January 20, 2010). This proposal was also rejected by ADOT.</p> <p>Throughout the DEIS, and throughout the time leading up to the publication of the DEIS, the inappropriate restrictions on the scoping of the study precluded the consideration of viable alternatives to the SMF. With the apparent need for a freeway that could handle considerable truck traffic, including hazmats, the natural consideration would have been the route that is currently the “Phoenix truck bypass” – SR-85 from I-10 at Buckeye to I-8 at Gila Bend to I-10 at Casa Grande. This route could become the I-10 and provide a bypass for all pass-through traffic, including the CANAMEX traffic. With appropriate access provided from the commercial area around 51st Avenue, it could also provide a main route for O&D traffic. It should at least be considered as an alternative. The planned route for I-11, looping southwest from I-10 west of downtown Phoenix, through Rainbow Valley, then rejoining I-10 near Casa Grande, should also be a considered alternative. It could accommodate all the truck traffic bypassing Phoenix with a shorter route than the current truck bypass. If the primary reason for wanting the SMF is to accommodate O&D truck traffic (although this is not stated in the DEIS, it is easy to come to this conclusion from what is stated), another alternative that should be considered is to create a freeway spur from I-10 West and/or from the real truck bypass into the commercial area around 51st Avenue.</p> <p>The point is that viable alternatives to the SMF exist, but the SMF is not a viable alternative itself. No amount of attempting to exclude alternatives through inappropriate scoping will make the SMF viable. If the need exists for accommodating truck traffic, several alternatives are available for consideration. ADOT should start over, state the real P&N, and produce a reasonable DEIS. This DEIS is fatally flawed, at least in part because the true P&N are disguised to try to force a non-viable solution.</p> <p>Air Quality</p> <p>The modeling of air pollution impacts in the DEIS do not include the issues involved with truck traffic. There are 3 specific “classes” of truck traffic that should have been considered:</p> <ol style="list-style-type: none">1. Pass-through traffic that now uses the official truck bypass2. CANAMEX traffic3. Origination and Destination (O&D) traffic to/from the commercial area around 51st Avenue <p>Many years ago, the idea of a truck bypass came up because there were chronic issues about air quality in the Phoenix metro area. The air quality was so bad and for</p>

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372	Air Quality	<p>The air quality assessment for impacts from carbon monoxide followed the U.S. Environmental Protection Agency guidelines in <i>Guideline for Modeling Carbon Monoxide from Roadway Intersections</i> (A-OAQPS, 1992). Inputs to the model were based on U.S. Environmental Protection Agency-recommended values or were selected to provide a conservative estimate of impacts. Modeling methodology and results were reviewed by the Federal Highway Administration, Arizona Department of Transportation, and Maricopa Association of Governments.</p> <p>The proposed freeway is part of a transportation system developed to improve mobility in the region by increasing capacity and allowing traffic—including truck traffic—to access a segment of the “loop” system (see pages 1-21, 1-22, 3-1, and 3-3 of the Final Environmental Impact Statement) in the Phoenix metropolitan area. The proposed South Mountain Freeway would be a commuter corridor, helping to move local traffic. As with all other freeways in the region, trucks would use it for the through-transport of freight, for transport to and from distribution centers, and for transport to support local commerce. The Maricopa Association of Governments travel demand model projects trucks will represent approximately 10 percent of the total traffic on the proposed freeway (this would equate to approximately 15,000 trucks per day based on an average total daily volume of 150,000 vehicles). See Figure 3-18, on page 3-36 of the Draft Environmental Impact Statement, for information related to use of the freeway. The air quality analyses considered the full vehicle fleet, including diesel trucks, as discussed above (see Final Environmental Impact Statement page 4-68).</p>
373	Trucks	<p>The 1995 Congressional federal definition states:</p> <p>“In the State of Arizona, the CANAMEX Corridor shall generally follow – (i) I-19 from Nogales to Tucson; (ii) I-10 from Tucson to Phoenix; and (iii) United States Route 60 in the vicinity of Phoenix to the Nevada Border.” (Source: <canamex.org/canamex/federal-definition>) The definition was intentionally left broad so that local, regional, and state agencies could further define the specific routes for the corridor.</p> <p>In April 2001, the Maricopa Association of Governments Regional Council formally adopted the route depicted in the map on page 3-64 as the CANAMEX Corridor within Maricopa County. As noted on page 3-64 of the Draft Environmental Impact Statement, in the Maricopa County area the CANAMEX Corridor is to follow Interstate 10 from Tucson to Interstate 8 near Casa Grande, Interstate 8 west to State Route 85 near Gila Bend, State Route 85 north to Interstate 10 northwest of Buckeye, Interstate 10 west to Wickenburg Road, Wickenburg Road to Vulture Mine Road west of Wickenburg, and then connect with the planned U.S. Route 93/U.S. Route 60 Wickenburg Bypass.</p>

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	<p>so long that public policy makers suggested designating a bypass for truck traffic around the urban core as one of the strategies to reduce particulate matter from truck exhaust in urban Maricopa County. The designated truck bypass is from I-10 at Buckeye to I-8 at Gila Bend to I-10 at Casa Grande. ADOT says this bypass is also the designated route of the CANAMEX Highway, although the CANAMEX web site contradicts this assertion, saying I-10 is the designated CANAMEX route. If the SMF were built, the bypass route, which has few amenities, would be a substantially longer route, about 55-60 miles longer than the route using the SMF. There is no law that would force trucks to use the longer route, so it is entirely likely that most of these trucks would come through Phoenix, negating the whole bypass strategy, and negating a public policy decision. But the reversal of this public policy decision is never mentioned in the DEIS.</p>
374	<p>The DEIS does not consider the additional air pollution from truck traffic from Mexico. The DEIS briefly mentions the issue, but it claims it has no way to know what impact this would be. This is not true. We know exactly the number of trucks arriving from Mexico and their destinations in the US, so this is data that is available for the DEIS. It is also absurd to dismiss this issue by claiming the CANAMEX traffic would use the truck bypass. Since it is likely that at least most of the CANAMEX traffic would use the SMF, this issue should have been studied.</p>
	<p>Trucks originating in Mexico will be fueled with diesel that doesn't meet the CARB diesel standards adopted by Arizona over a decade ago. In Mexico, there is no regulation about the sulfur in diesel fuel. In Arizona, the law was changed to allow only diesel fuel to be sold that has had 98% of the sulfur removed. This was another part of the strategy to bring Maricopa County into compliance with the particulate matter standards required by the Clean Air Act (CAA). There was extensive modeling of the effect of adopting the CARB diesel standards and a discussion of this in the Arizona legislature, where it passed, so the data is in government hands.</p>
375	<p>The DEIS has no analysis of the current or enhanced increase in freight volume resulting from the port activity in Guyamas and Puerto Colonet and the Union Pacific rail efforts moving that freight from those ports into Tucson and then north to Phoenix. Also there is the expectation of a new Union Pacific rail yard at Picacho Peak, which would handle tens of thousands of containers originating in California and Tucson ports. This additional planned container traffic would result in a significant increase in freight flows to Phoenix, specifically to the hubs along 51st Avenue.</p>
	<p>Chapter 3 describes freight and trucks as pass through, but that is misleading. The freight enters Phoenix and is deposited, then is “exchanged” for loads heading in the opposite direction. So even though 70% of the freight passes through Phoenix, it is O&D traffic that terminates in Phoenix as a transfer point.</p>
	<p>There is also the issue of the 51st Avenue tank farm and the tanker truck traffic that the SMF would get as a result of a new shortcut for these trucks. Expectations for an</p>

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374	Trucks	<p>Arizona highways, as are most highways across the United States, are open to all kinds of traffic, so long as the cargo being carried is in accordance with U.S. Department of Transportation regulations for the specific type of cargo. The South Mountain Freeway, if implemented, is expected to operate under the same rules as other similar facilities in the state; truck traffic would be expected to be permissible (see text box on page 4-157 of the Final Environmental Impact Statement).</p> <p>Trucks crossing from Mexico to Arizona are restricted to the commercial zones within 25 miles of the border. The Federal Motor Carrier Safety Administration is administering a United States-Mexico cross-border, long-haul trucking pilot program. The program tests and demonstrates the ability of Mexico-based motor carriers to operate safely in the United States beyond the municipalities and commercial zones along the United States-Mexico border (see <fmcsa.dot.gov/intl-programs/trucking/trucking-program.aspx>).</p> <p>Petróleos Mexicanos (better known as Pemex), the Mexican state-owned petroleum company, has guaranteed 15 parts per million in its sulfur diesel fuel in the border region (see <http://transportpolicy.net/index.php?title=Mexico:_Fuels:_Diesel_and_Gasoline>).</p> <p>As explained on pages 4-69 and 4-77 of the Draft and Final Environmental Impact Statements, respectively, the emissions analysis conducted for the project shows that future mobile source air toxics emissions will be lower than current levels. This analysis included projected truck traffic.</p>
375	Trucks	<p>Like other “loop” freeways in the Phoenix metropolitan area, the proposed freeway would be a commuter corridor, helping to move local traffic. As with all other freeways in the region, trucks would use it for the through-transport of freight, for transport to and from distribution centers, and for transport to support local commerce. Nevertheless, the primary vehicles on the proposed freeway would be automobiles. The Maricopa Association of Governments regional travel demand model projects that trucks would represent approximately 10 percent of the total traffic on the proposed action, similar to what is currently experienced on other regional freeways such as Interstate 10, State Route 101L, and U.S. Route 60. The road network in the Maricopa Association of Governments travel demand model includes the Interstate 8 and State Route 85 corridor. So, while the roads are not in the Study Area for the proposed action, traffic and trip distributions along the corridor are included in the traffic analysis for the proposed action. Any traffic, including trucks, that would shift from the Interstate 8 and State Route 85 corridor to the proposed action would be included in the vehicle mix considered in the analysis.</p> <p>The disclosure of the air quality consequences of the proposed action, beginning on page 4-65 of the Draft Environmental Impact Statement, include projected truck traffic in the analysis.</p> <p>The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. The air quality analyses were updated using the updated projections related to regional traffic (see section beginning on page 4-68 of the Final Environmental Impact Statement). No substantial differences between the conclusions of the Draft and Final Environmental Impact Statements resulted from this update.</p>

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	<p>so long that public policy makers suggested designating a bypass for truck traffic around the urban core as one of the strategies to reduce particulate matter from truck exhaust in urban Maricopa County. The designated truck bypass is from I-10 at Buckeye to I-8 at Gila Bend to I-10 at Casa Grande. ADOT says this bypass is also the designated route of the CANAMEX Highway, although the CANAMEX web site contradicts this assertion, saying I-10 is the designated CANAMEX route. If the SMF were built, the bypass route, which has few amenities, would be a substantially longer route, about 55-60 miles longer than the route using the SMF. There is no law that would force trucks to use the longer route, so it is entirely likely that most of these trucks would come through Phoenix, negating the whole bypass strategy, and negating a public policy decision. But the reversal of this public policy decision is never mentioned in the DEIS.</p> <p>The DEIS does not consider the additional air pollution from truck traffic from Mexico. The DEIS briefly mentions the issue, but it claims it has no way to know what impact this would be. This is not true. We know exactly the number of trucks arriving from Mexico and their destinations in the US, so this is data that is available for the DEIS. It is also absurd to dismiss this issue by claiming the CANAMEX traffic would use the truck bypass. Since it is likely that at least most of the CANAMEX traffic would use the SMF, this issue should have been studied.</p> <p>Trucks originating in Mexico will be fueled with diesel that doesn't meet the CARB diesel standards adopted by Arizona over a decade ago. In Mexico, there is no regulation about the sulfur in diesel fuel. In Arizona, the law was changed to allow only diesel fuel to be sold that has had 98% of the sulfur removed. This was another part of the strategy to bring Maricopa County into compliance with the particulate matter standards required by the Clean Air Act (CAA). There was extensive modeling of the effect of adopting the CARB diesel standards and a discussion of this in the Arizona legislature, where it passed, so the data is in government hands.</p> <p>The DEIS has no analysis of the current or enhanced increase in freight volume resulting from the port activity in Guyamas and Puerto Colonet and the Union Pacific rail efforts moving that freight from those ports into Tucson and then north to Phoenix. Also there is the expectation of a new Union Pacific rail yard at Picacho Peak, which would handle tens of thousands of containers originating in California and Tucson ports. This additional planned container traffic would result in a significant increase in freight flows to Phoenix, specifically to the hubs along 51st Avenue.</p> <p>Chapter 3 describes freight and trucks as pass through, but that is misleading. The freight enters Phoenix and is deposited, then is “exchanged” for loads heading in the opposite direction. So even though 70% of the freight passes through Phoenix, it is O&D traffic that terminates in Phoenix as a transfer point.</p> <p>There is also the issue of the 51st Avenue tank farm and the tanker truck traffic that the SMF would get as a result of a new shortcut for these trucks. Expectations for an</p>
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376	Purpose and Need	<p>Some trucks would use the proposed freeway to avoid Interstate 10 through downtown Phoenix, but this is not the primary purpose of the proposed action. The proposed freeway is part of a transportation system developed to improve mobility in the region by increasing capacity and allowing traffic—including truck traffic—to access a segment of the “loop” system (see pages 1-21, 1-22, 3-1, and 3-3 of the Final Environmental Impact Statement) in the Phoenix metropolitan area. The proposed South Mountain Freeway would be a commuter corridor, helping to move local traffic. As with all other freeways in the region, trucks would use it for the through-transport of freight, for transport to and from distribution centers, and for transport to support local commerce.</p> <p>Nevertheless, the primary user vehicles of the proposed freeway would be automobiles. The Maricopa Association of Governments regional travel demand model projects that truck traffic would represent approximately 10 percent of the total traffic on the proposed action, similar to what is currently experienced on other regional freeways such as Interstate 10, State Route 101L, and U.S. Route 60. As disclosed in the Draft Environmental Impact Statement, trucking destinations in the Phoenix metropolitan area would still prompt truck drivers to enter congested areas. Choosing to travel on the proposed freeway versus Interstate 10 would not produce substantial travel-time benefits. Therefore, it is expected that “true” through-truck traffic (not having to stop in the metropolitan area) would continue to use the faster, designated, and posted bypass system of Interstate 8 and State Route 85.</p>

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377	<p>increase from the transmix pipeline, which would result in an increase in tanker truck traffic, should have been considered in a truck analysis.</p> <p>If all this additional pollution had been honestly quantified and factored in, it would likely have shown a huge net increase in air pollution from the SMF, and associated increases in asthma, heart disease, premature death, and other adverse health impacts.</p> <p>In 2005, there was an extensive air monitoring of certain toxic chemicals (air toxics) conducted by EPA and ADEQ in a joint effort named the Joint Air Toxics Assessment Program (JATAP). The monitoring sites included a site near St. Johns on the GRIC, and some in west Phoenix and South Phoenix. The JATAP monitoring results were reported in 2006, during a time the data for the DEIS was being gathered, and it found levels of certain toxic chemicals associated with vehicular emissions were above the standard of a one in a million chance of cancer in a lifetime of exposure in the west Phoenix, south Phoenix, and GRIC sites. The JATAP monitoring found in the high end of the monitoring levels, formaldehyde at 34 times this standard; benzene at 8 times this standard, 1,3 butadiene at 7.5 times this standard, and acetaldehyde at 3.4 times this standard. And, remember, citizens are being subjected to all of these carcinogens, not just one. Some of these chemicals are attributed to “mobile sources,” or vehicular traffic burning hydrocarbons. Clearly, adding more vehicular traffic emissions by building a freeway where there had not been one would add to this toxic burden.</p> <p>The JATAP results are not included in the DEIS, but instead there is a mention of the uncertainty of the risk from these air toxics standards, which is not true. The cancer risk standards have been promulgated and published by EPA after extensive research and study, and they are well known.</p> <p>The portion of Maricopa County that is characterized as the Phoenix metro area has had problems for decades meeting the air quality standards for particulate matter (PM) and other criteria pollutants. Ozone levels are too high in the East Valley and Fountain Hills, for example. There have been several exceedances of the standards for PM set by EPA under the authorities given the agency by the Clean Air Act (CAA). The problem has been so bad over the years that every possible delay and postponement allowed under the CAA to come up with a plan to meet regulatory levels of particulate matter have now been exhausted. So, currently, EPA is examining sanctions that include blocking a billion dollars in highway funds. The Arizona Department of Environmental Quality (ADEQ) has tried to explain away the several exceedances of the PM standards in the last year or so by blaming it on dust storms and weather-related problems. But these were not all related to weather.</p> <p>Almost every one of these PM exceedances have been detected at the air quality monitor at 43rd Avenue and Broadway Road. The placement of a freeway about a mile upwind from a monitor that has had all these high levels seems foolish and short sighted. And the impacts and risks of this were not examined in the DEIS. Nor</p>

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377	Air Quality, Health Risk Assessment	<p>The carbon monoxide analysis was updated in the Final Environmental Impact Statement. Although a qualitative analysis of particulate matter (PM₁₀) was presented in the Draft Environmental Impact Statement, a quantitative project-level particulate matter (PM₁₀) hot-spot analysis is included in the Final Environmental Impact Statement. The results of the air quality updates are summarized in the prologue to the Final Environmental Impact Statement (page xiii) and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement. The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones.</p> <p>The emission modeling developed for the proposed action showed that for the mobile source air toxics study area, there would be little difference in total annual emissions of mobile source air toxics emissions between the Preferred and No-Action Alternatives (less than a 1 percent difference) in 2025 and 2035. With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions (see discussion beginning on page 4-77 of the Final Environmental Impact Statement).</p> <p>The Role of Health Risk Assessment in a National Environmental Policy Act Context</p> <p>The Federal Highway Administration’s National Environmental Policy Act documents are developed under two guiding regulations: the Council on Environmental Quality’s National Environmental Policy Act regulations applicable to all federal agencies (40 Code of Federal Regulations Parts 1500–1508) and the Federal Highway Administration’s implementing regulations governing Federal Highway Administration National Environmental Policy Act documents (23 Code of Federal Regulations Part 771). In its mobile source air toxics guidance, the Federal Highway Administration discusses 40 Code of Federal Regulations Part 1502.22 and acknowledges that while much work has been done to assess the overall health risk of mobile source air toxics, analytical tools and techniques for assessing project-specific health outcomes as a result of lifetime exposures to mobile source air toxics remain limited. These limitations impede the ability to evaluate the potential health risks attributable to exposure to mobile source air toxics as part of the decision-making process in the National Environmental Policy Act context. However, as with any analysis that the Federal Highway Administration conducts for National Environmental Policy Act purposes, the Federal Highway Administration’s approach for mobile source air toxic analysis in National Environmental Policy Act documents is informed not just by 40 Code of Federal Regulations Part 1502.22, but by all applicable Council on Environmental Quality requirements.</p> <p>Summary information about the findings of the Joint Air Toxics Assessment Project study is provided as background information in the Draft and Final Environmental Impact Statements, but the study itself is not relevant to the type of analysis done pursuant to the Federal Highway Administration’s mobile source air toxics guidance, which is an emissions analysis. Monitored ambient concentrations of mobile source air toxics (the focus of the Joint Air Toxics Assessment Project) do not inform this type of analysis. While monitoring data can be useful for defining</p>

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377 (cont.)		<p>current conditions in the affected environment (to the extent that the monitoring data are current),they don't tell us anything about future conditions, or the impacts of the project itself, which is why an emissions analysis was performed. The mobile source air toxic analysis presented beginning on page 4-77 of the Final Environmental Impact Statement is an estimated inventory of mobile source air toxic emissions for the entire Study Area for 2025 and 2035. This approach was used because the inventory estimate accounts for changes in traffic and emissions on all roadways affected by a proposed project, and would, therefore, be a more reliable predictor of changes in exposure to mobile source air toxics.</p> <p>The appropriateness of air toxics health risk assessment as an analysis method for National Environmental Policy Act documents is discussed below, in the context of Council on Environmental Quality requirements for these documents. In addition to the 40 Code of Federal Regulations Part 1502.22 provisions regarding uncertainty and limitations discussed in the Federal Highway Administration's MSAT Interim Guidance Appendix C, three other provisions of the Council on Environmental Quality regulations are particularly relevant to the topic of health risk assessment:</p> <p><i>40 Code of Federal Regulations § 1500.1(b): NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA. Most important, NEPA documents must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail.</i></p> <p><i>40 Code of Federal Regulations § 1502.1: An environmental impact statement is more than a disclosure document. It shall be used by Federal officials in conjunction with other relevant material to plan actions and make decisions.</i></p> <p><i>40 Code of Federal Regulations § 1502.2: (a) Environmental impact statements shall be analytic rather than encyclopedic. (b) Impacts shall be discussed in proportion to their significance.(c) Environmental impact statements shall be kept concise and shall be no longer than absolutely necessary to comply with NEPA and with these regulations.</i></p> <p>Section 1500.1(b) states that information for decision making must be of high quality and based on accurate scientific analysis. Air toxics health risk assessments can involve large uncertainties. The mobile source air toxic health risk assessment uncertainty builds on itself—each step of the analysis involves uncertainties, including modeling traffic and then modeling emissions, and using this estimated output to model dispersion/concentrations, which provide information for estimating or assuming exposures to those concentrations, and finally predicting health outcomes. Major uncertainties are associated with traffic and emissions projections over a 70-year period, and dispersion models are typically held to a “factor of 2” performance standard. Health impacts of mobile source air toxics in the U.S. Environmental Protection Agency Integrated Risk Information System are based on a 70-year lifetime exposure, which introduces significant uncertainty (e.g., on average, people in the United States change residence approximately once every 8 years and change jobs once every 3). Finally, as noted above, the U.S. Environmental Protection Agency's Integrated Risk Information System provides toxicity (risk) values for various pollutants and routes of exposure; in a health risk assessment, the Federal Highway Administration would compare</p>

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377 (cont.)		<p>calculated concentrations of mobile source air toxic pollutants to the Integrated Risk Information System values to estimate health risk. In the Integrated Risk Information System, the U.S. Environmental Protection Agency states the toxicity values are believed to be accurate to within an order of magnitude (a factor of 10). The total cumulative uncertainty involved in highway project health risk assessment is much larger than the change in emissions attributable to projects (typically a few percentage points). In this context, the information would not necessarily have a strong nexus to the requirements for high-quality information and accurate scientific analysis.</p> <p>Section 1500.1(b) also directs agencies to focus their National Environmental Policy Act analysis and documentation on issues that are truly significant to the action in question. In the context of mobile source air toxics, the Federal Highway Administration must consider whether changes in mobile source air toxic emissions attributable to a project have the potential for significant health risk. Using cancer risk as an example, the U.S. Environmental Protection Agency estimates that the overall risk of cancer in the United States is approximately 330,000 in a million, and that air toxics (from all sources) are responsible for a risk of approximately 50 in a million. In its most recent mobile source air toxics rule-making, the U.S. Environmental Protection Agency estimated mobile source air toxic cancer risk, after implementation of emissions controls, at approximately 5 in a million (or 0.0015 percent of overall cancer risk from any cause). For the Preferred Alternative, the mobile source air toxic emissions analysis for the Study Area found little difference in total annual emissions of mobile source air toxic emissions between the Preferred and No Action Alternatives (less than a 1 percent difference) in 2025 and 2035. With the Preferred Alternative in 2035, modeled mobile source air toxic emissions would decrease by more than 80 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions (see the discussion beginning on page 4-77 of the Final Environmental Impact Statement).</p> <p>In summary, available information from the U.S. Environmental Protection Agency indicates that mobile source air toxics are a small component of overall cancer risk, and the analysis for the Final Environmental Impact Statement indicates both that the Preferred Alternative would result in a small change in the emissions contributing to this risk and that emissions will decline by a large amount regardless of alternative.</p>

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377 (cont.)		<p>As described above and in the air quality technical report, results from the health risk assessment would be influenced more by the uncertainty introduced into the process through assumptions and speculations rather than by genuine insight into the actual health impacts directly attributable to mobile source air toxic exposure associated with a project. Therefore, outcomes of such a health risk assessment do not provide useful information for decision makers, as required by Section 1502.1. The Federal Highway Administration emissions analysis meets the requirement to produce information that is useful for both disclosure and decision making because it allows the public and decision makers to see which alternative has less mobile source air toxic emissions, with much less uncertainty than a health risk assessment.</p> <p>Given the uncertainty of a mobile source air toxic health risk assessment, the Federal Highway Administration instead addresses the potential impacts of mobile source air toxics through an emissions assessment in its National Environmental Policy Act documents. For smaller projects with a lower likelihood of a meaningful impact, this discussion is qualitative. For larger projects, emissions analysis is conducted. The Federal Highway Administration approach is consistent with the Council on Environmental Quality’s direction in Section 1502.2(b) to discuss impacts in proportion to their significance. The results of an emissions analysis can be summarized concisely in a National Environmental Policy Act document and provide useful information for decision makers (e.g., an alternative that has lower emissions is likely to be “better” from a mobile source air toxics health risk standpoint than one that has higher emissions).</p> <p>While the U.S. Environmental Protection Agency and the Federal Highway Administration both agree on the usefulness of addressing mobile source air toxics in National Environmental Policy Act documents for highway projects, the agencies disagree about the value of health risk assessment as a method for doing so.</p>

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377 (cont.)		<p>Another consideration with respect to health impacts is that the Preferred Alternative would also reduce in-vehicle mobile source air toxics exposure as opposed to the No-Action Alternative. The U.S. Environmental Protection Agency has found that in-vehicle benzene concentrations were between 2.5 and 40 times higher than nearby ambient concentrations, based on a review of studies discussed in the Regulatory Impact Analysis for the U.S. Environmental Protection Agency’s 2007 mobile source air toxics rule-making (Final Regulatory Impact Analysis, Environmental Protection Agency 420-R-07-002, 3-17 [February 2007]). Construction of the Preferred Alternative would result in a reduction in benzene exposure to drivers and passengers for two reasons: decreased travel times (motorists would spend less time in traffic to reach their destinations) and lower emissions rates (attributable to speed improvements). Reducing on-road exposure would provide a health benefit for motorists using the roadway network. Congestion relief resulting from the proposed freeway would provide localized air quality emissions reductions on area freeways and arterial streets and at interchanges, benefiting users of area highways and those living near congested roads.</p> <p>The Federal Highway Administration determined that a supplemental environmental impact statement is not required at this time because there were no changes to the proposed action that will result in significant environmental impacts not evaluated in the Draft Environmental Impact Statement nor is there new information relevant to environmental concerns and bearings on the proposed action or its impacts that will result in significant environmental impacts not evaluated in the Draft Environmental Impact Statement.</p>

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	<p>increase from the transmixon pipeline, which would result in an increase in tanker truck traffic, should have been considered in a truck analysis.</p> <p>If all this additional pollution had been honestly quantified and factored in, it would likely have shown a huge net increase in air pollution from the SMF, and associated increases in asthma, heart disease, premature death, and other adverse health impacts.</p> <p>In 2005, there was an extensive air monitoring of certain toxic chemicals (air toxics) conducted by EPA and ADEQ in a joint effort named the Joint Air Toxics Assessment Program (JATAP). The monitoring sites included a site near St. Johns on the GRIC, and some in west Phoenix and South Phoenix. The JATAP monitoring results were reported in 2006, during a time the data for the DEIS was being gathered, and it found levels of certain toxic chemicals associated with vehicular emissions were above the standard of a one in a million chance of cancer in a lifetime of exposure in the west Phoenix, south Phoenix, and GRIC sites. The JATAP monitoring found in the high end of the monitoring levels, formaldehyde at 34 times this standard; benzene at 8 times this standard, 1,3 butadiene at 7.5 times this standard, and acetaldehyde at 3.4 times this standard. And, remember, citizens are being subjected to all of these carcinogens, not just one. Some of these chemicals are attributed to “mobile sources,” or vehicular traffic burning hydrocarbons. Clearly, adding more vehicular traffic emissions by building a freeway where there had not been one would add to this toxic burden.</p> <p>The JATAP results are not included in the DEIS, but instead there is a mention of the uncertainty of the risk from these air toxics standards, which is not true. The cancer risk standards have been promulgated and published by EPA after extensive research and study, and they are well known.</p> <p>The portion of Maricopa County that is characterized as the Phoenix metro area has had problems for decades meeting the air quality standards for particulate matter (PM) and other criteria pollutants. Ozone levels are too high in the East Valley and Fountain Hills, for example. There have been several exceedances of the standards for PM set by EPA under the authorities given the agency by the Clean Air Act (CAA). The problem has been so bad over the years that every possible delay and postponement allowed under the CAA to come up with a plan to meet regulatory levels of particulate matter have now been exhausted. So, currently, EPA is examining sanctions that include blocking a billion dollars in highway funds. The Arizona Department of Environmental Quality (ADEQ) has tried to explain away the several exceedances of the PM standards in the last year or so by blaming it on dust storms and weather-related problems. But these were not all related to weather.</p> <p>Almost every one of these PM exceedances have been detected at the air quality monitor at 43rd Avenue and Broadway Road. The placement of a freeway about a mile upwind from a monitor that has had all these high levels seems foolish and short sighted. And the impacts and risks of this were not examined in the DEIS. Nor</p>
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378	Air Quality	<p>The Draft Environmental Impact Statement addresses the history of air quality in the region (see text beginning on page 4-68 of the Final Environmental Impact Statement). The Clean Air Act § 109(b)(1) requires the U.S. Environmental Protection Agency to promulgate primary National Ambient Air Quality Standards at levels that allow an adequate margin of safety to protect the public health. Air quality in the Phoenix metropolitan area has improved over time; Phoenix was redesignated to attainment/maintenance for carbon monoxide in 2005, and the U.S. Environmental Protection Agency recently determined that Phoenix has attained the particulate matter (PM₁₀) standard. These improvements are largely associated with cleaner fuels and lower-emission vehicles along with local controls on fugitive dust. Future emissions would also be reduced by the use of cleaner burning fuels, technological advances in automotive design (including the greater use of alternative fuel vehicles), reformulated gasoline, gas can standards, stricter enforcement of emission standards during inspections, heavy-duty diesel engine and on-highway diesel sulfur control programs, dust control programs, and others. The air quality assessment for the proposed freeway analyzed impacts from carbon monoxide and particulate matter (PM₁₀) and followed U.S. Environmental Protection Agency guidelines. For mobile source air toxics, the analysis showed that for the Study Area, constructing the freeway would have a marginal effect on annual emissions in 2025 and 2035 (less than a 1 percent difference in total annual emissions between the Preferred Alternative and No-Action Alternative). With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions. The air quality analyses were updated for the Final Environmental Impact Statement, including a quantitative particulate matter (PM₁₀) analysis, and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement.</p> <p>Congestion relief resulting from the proposed freeway would provide localized air quality emissions reductions on area freeways and arterial streets and at interchanges, benefiting users of area highways and those living near congested roads.</p> <p>Fugitive dust and mobile source emissions from construction of the proposed freeway would be controlled by requiring the contractor to comply with the dust-control methods in the Arizona Department of Transportation's <i>Standard Specifications for Road and Bridge Construction</i> (2008) and Maricopa County Rule 310, Fugitive Dust Ordinance. Disruption to traffic, especially during peak travel periods, would be minimized by a traffic control plan to help reduce impacts of traffic congestion and associated emissions during construction. These methods are discussed on page 4-85 of the Final Environmental Impact Statement.</p> <p>According to the air quality analyses conducted for the proposed freeway, no violations of either the carbon monoxide or particulate matter (PM₁₀) standards were identified, even at worst-case locations along the project corridor. Thus, the carbon monoxide and particulate analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones. Therefore, no loss of federal funds would occur.</p>

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	<p>has the DEIS examined the dust that would be kicked up during the construction phase, when thousands of tons of dirt would be moved around upwind of the monitor. The proposed path of the SMF would take it over the Salt River bed. To construct the bridges would involve extensive earthmoving. Also, blasting South Mountain would release enormous amounts of dust (PM), and the natural wind currents and prevailing wind patterns would push this PM toward the air monitor at 43rd Avenue.</p> <p>The SMF could therefore be the most expensive freeway ever built. Not only the construction costs, and the more than \$20 million already spent on the DEIS, but then there would be the loss of a billion dollars in highway funds. This is a gift that keeps on giving, or taking, as there would be subsequent billions lost through the years due to PM exceedances.</p> <p>The DEIS has not considered the effects of the additional pollution caused by the SMF – particularly the truck traffic – on the school children and elderly in proximity to the freeway route. Studies have shown sharp increases in black carbon on roadways with high levels of diesel traffic. The danger zone extends to about ½ mile from the roadway. The SMF would be within ½ mile of 20 schools with over 11,000 students. There would also be many elderly residents within that range who are particularly susceptible to the effects of air pollution. All would be at risk of adverse health effects including asthma and cardiovascular illness. (Thurston, <i>The Adverse Human Health Effects of Air Pollution that Result from Traffic-Related Air Pollution</i>, July 2013)</p> <p>Effective mitigation of the effects of air pollution could only be achieved by barring truck traffic from the SMF. While effective filters could be placed in homes and schools near the freeway, these filters would not only be prohibitively expensive for all the schools and residences involved, but they would also only be effective for the time the school children and residents remained inside with windows closed. People cannot be expected to live their lives inside. In fact, one of the many reasons people live in Ahwatukee Foothills is because of the weather and the possibility of participating in outdoor activities. School children need to be able to be outside to use playgrounds and sporting facilities. It is hard to imagine how air pollution effects could be mitigated for all the school children participating in and attending sporting events at the Desert Vista High School stadium, for example.</p> <p>Modeling</p> <p>There are fundamental problems with the modeling described in the DEIS.</p> <p>The DEIS uses faulty wind speed data and methodology in doing its modeling. Wind speed is an essential part of the air shed modeling that ADOT used to determine, in part, regional stability – which relates to inversion layers and local weather patterns impacting projected freeway pollution. For example, the DEIS inputs are based on times that are not concurrent with pollution building hours. The DEIS also failed to</p>

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379	Air Quality	<p>A common theme in public comments on the proposed project has been the potential impacts of the project on children's health, primarily through vehicle emissions and noise. Many commenters raised concerns about the proximity of the project to schools or other aspects of the project that may affect children. In addition, the U.S. Environmental Protection Agency requested that the Final Environmental Impact Statement address Executive Order 13045, <i>Protection of Children from Environmental Health Risks and Safety Risks</i>.</p> <p>Throughout the Final Environmental Impact Statement, potential impacts on and subsequent mitigation for human health are disclosed and identified, as inherent in the environmental impact statement process. The Final Environmental Impact Statement incorporates an assessment of the potential impacts of the proposed project on all populations, including children. The Final Environmental Impact Statement addresses potential impacts of the project on children in the Chapter 4 environmental consequences analyses.</p> <p>The U.S. Environmental Protection Agency's Toxicity and Exposure Assessments for Children's Health report (see page 4-73 of the Final Environmental Impact Statement) indicated that indoor air concentrations of benzene are usually higher than outdoor levels and that indoor air in smokers' homes is a significant contributor to children's exposures. It mentioned children when identifying the effects of acute exposure to naphthalene. The Final Environmental Impact Statement acknowledges and fully discloses public scoping comments that raised the topic of health effects on neighborhoods and adjacent schools (see page 4-31 of the Final Environmental Impact Statement).</p> <p>The Final Environmental Impact Statement evaluates Clean Air Act criteria air pollutant concentrations in Maricopa County and the Phoenix area (see pages 4-75 to 4-77 of the Final Environmental Impact Statement). With regard to air quality impacts, the Final Environmental Impact Statement addresses children's health impacts within the broader discussion regarding health impacts under the National Ambient Air Quality Standards. Clean Air Act Section 109(b)(1) requires the U.S. Environmental Protection Agency to promulgate primary National Ambient Air Quality Standards at levels that allow an adequate margin of safety and are requisite to protect the public health. As noted by the U.S. Environmental Protection Agency in its 2013 rulemaking for particulate matter, Clean Air Act Section 109's legislative history demonstrates that the primary standards are “to be set at the maximum permissible ambient air level... which will protect the health of any [sensitive] group of the population” (78 <i>Federal Register</i> 3086 and 3090) (quoting S. Rep. No. 91-1196, 91st Cong., 2 Sess. 10 [1970]) (alterations in original). Accordingly, the Final Environmental Impact Statement National Ambient Air Quality Standards-based evaluation of criteria air pollutants includes a health-based review of sensitive populations, including children, given the National Ambient Air Quality Standards inherent consideration of those factors. Furthermore, the National Ambient Air Quality Standards-based assessment ensures adequate consideration of health-based issues as “[t]he requirement that primary standards provide an adequate margin of safety was intended to address uncertainties associated with inconclusive scientific and technical information ... and to protect against hazards that research has not yet identified” (78 <i>Federal Register</i> 3090).</p> <p>Sensitive receivers for air and noise are already included in the air quality and noise analyses in accordance with State and federal guidance. Both sections, <i>Air Quality</i> and <i>Noise</i>, beginning on Final Environmental Impact Statement pages 4-68 and 4-88, respectively, have addressed requirements under the National Environmental Policy Act. As stated on page 4-89 of the Final Environmental Impact Statement, over 220 sensitive receivers were evaluated at exterior locations from a traffic noise perspective. All of the receivers represent noise-sensitive land uses in proximity to the proposed project, including homes, schools, and parks, and these receivers would have higher noise levels than similar facilities more distant from the proposed action.</p>

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	<p>has the DEIS examined the dust that would be kicked up during the construction phase, when thousands of tons of dirt would be moved around upwind of the monitor. The proposed path of the SMF would take it over the Salt River bed. To construct the bridges would involve extensive earthmoving. Also, blasting South Mountain would release enormous amounts of dust (PM), and the natural wind currents and prevailing wind patterns would push this PM toward the air monitor at 43rd Avenue.</p> <p>The SMF could therefore be the most expensive freeway ever built. Not only the construction costs, and the more than \$20 million already spent on the DEIS, but then there would be the loss of a billion dollars in highway funds. This is a gift that keeps on giving, or taking, as there would be subsequent billions lost through the years due to PM exceedances.</p> <p>The DEIS has not considered the effects of the additional pollution caused by the SMF – particularly the truck traffic – on the school children and elderly in proximity to the freeway route. Studies have shown sharp increases in black carbon on roadways with high levels of diesel traffic. The danger zone extends to about ½ mile from the roadway. The SMF would be within ½ mile of 20 schools with over 11,000 students. There would also be many elderly residents within that range who are particularly susceptible to the effects of air pollution. All would be at risk of adverse health effects including asthma and cardiovascular illness. (Thurston, <i>The Adverse Human Health Effects of Air Pollution that Result from Traffic-Related Air Pollution</i>, July 2013)</p> <p>Effective mitigation of the effects of air pollution could only be achieved by barring truck traffic from the SMF. While effective filters could be placed in homes and schools near the freeway, these filters would not only be prohibitively expensive for all the schools and residences involved, but they would also only be effective for the time the school children and residents remained inside with windows closed. People cannot be expected to live their lives inside. In fact, one of the many reasons people live in Ahwatukee Foothills is because of the weather and the possibility of participating in outdoor activities. School children need to be able to be outside to use playgrounds and sporting facilities. It is hard to imagine how air pollution effects could be mitigated for all the school children participating in and attending sporting events at the Desert Vista High School stadium, for example.</p> <p>Modeling</p> <p>There are fundamental problems with the modeling described in the DEIS.</p> <p>The DEIS uses faulty wind speed data and methodology in doing its modeling. Wind speed is an essential part of the air shed modeling that ADOT used to determine, in part, regional stability – which relates to inversion layers and local weather patterns impacting projected freeway pollution. For example, the DEIS inputs are based on times that are not concurrent with pollution building hours. The DEIS also failed to</p>
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379 (cont.)		<p>Receptor placement met the criteria for selecting modeling locations as specified in 40 Code of Federal Regulations § 93.123(a). The carbon monoxide analysis was updated in the Final Environmental Impact Statement. Although a qualitative analysis of particulate matter (PM₁₀) was presented in the Draft Environmental Impact Statement, a quantitative project-level particulate matter (PM₁₀) hot-spot analysis is included in the Final Environmental Impact Statement. The results of the air quality updates are summarized in the prologue to the Final Environmental Impact Statement (beginning on page xiii) and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement. The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones. Through analysis, the Federal Highway Administration has determined that the proposed project would not produce disproportionate impacts on children.</p> <p>Congestion relief resulting from the proposed freeway would provide localized air quality emissions reductions on area freeways and arterial streets and at interchanges, benefiting users of area highways and those living near congested roads.</p> <p>Full disclosure about <i>Information Availability Constraints in Analyzing Project-Specific MSATs Impacts</i> begins on page 4-69 of the Draft Environmental Impact Statement in accordance with Council on Environmental Quality regulations [40 Code of Federal Regulations, Section 1502.22(b)] regarding incomplete or unavailable information. This section includes a basic analysis of the likely mobile source air toxics emissions impacts of the proposed action and the No-Action Alternative, but it is the Federal Highway Administration's view that information to credibly predict project-specific health impacts attributable to changes in mobile source air toxics emissions associated with a proposed set of freeway alternatives is incomplete or unavailable.</p>
380	Air Quality	<p>The air quality assessment for the proposed freeway analyzed impacts from carbon monoxide and particulate matter (PM₁₀) and followed U.S. Environmental Protection Agency guidelines. For mobile source air toxics, the analysis showed that for the Study Area, constructing the freeway would have a marginal effect on annual emissions in 2025 and 2035 (less than a 1 percent difference in total annual emissions between the Preferred Alternative and No-Action Alternative). With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions. The air quality analyses were updated for the Final Environmental Impact Statement, including a quantitative particulate matter (PM₁₀) analysis, and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement.</p> <p>According to the air quality analyses conducted for the proposed freeway, no violations of either the carbon monoxide or particulate matter (PM₁₀) standards were identified, even at worst-case locations along the project corridor. Thus, the carbon monoxide and particulate analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones. Therefore, no mitigation of these effects is required.</p>
381		Specific comments are addressed below.

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	correlate the morning traffic hours 0500 to 1100 with the build up of tail pipe emissions during an aid shed inversion. The ability to determine CO and particulate concentrations needs accurate wind data measurements during periods expected to have high pollutant concentrations.
383	The South Mountain Transportation Corridor Study (SMTC) – a scoping document/component of the DEIS – confirmed that South Mountain greatly influences the local air shed movement. According to the SMTC, down slopes bring cooler air in the evenings. The SMTC and the DEIS, however, failed to indicate that this process intensifies the morning desert inversion, exacerbating pollutant concentrations. Air quality would worsen by the influence of the mountain and any build option. The mountain creates its own small air shed, which was not evaluated by the DEIS. All reporting data used valley wide components for stated results.
384	<p>The sampling and stability data relied on by the SMTC and the DEIS is inaccurate. ADOT relies on air data taken at the Phoenix airport in the middle of the Valley without terrain conditions that proximate the region impacted by the SMF. Even based on the airport data, however, ADOT finds E and F stability 57% of the time. The actual SMF stability would be much worse, compounding Phoenix airport conditions by stronger temperature inversions because of the mountain's location and size. More pollutants from the freeway next to the ground would be trapped more quickly with significantly higher expected pollutant concentrations in the Ahwatukee Foothills community.</p> <p>The DEIS did not use MCAQD DELTA Temperature instruments for calculating inversion conditions to determine accurate pollutant concentration projections. DEIS technical documents clearly show that Maricopa County Air Quality delta T systems data was not used for actual ground level measurements of temperature inversions. Without this data of actual inversion strength, which shows how quickly pollutant concentrations will increase, any modeling cannot accurately reflect the population exposure to those pollutants. Stability and Air Quality modeling conducted by ADOT as set forth in the DEIS provided no useful data and must not be used to determine potential air pollution concentrations of the SMF.</p> <p>ADOT used Aircraft Communications Addressing and Reporting System (ACARS) for vertical temperatures and wind profiles. This method does not correlate to ground level inversion strength for population exposure and is not a scientific method to derive accurate results. Data used does not have any quality assurance or quality control measurements. This means the equipment used does not have proven repeatability to produce the same temperature or wind speed for any given measurement. Moreover, no standard heights were used for correlating air shed temperatures. For example, one data point is measured at 2000 feet, the next is at 3000 feet, separated by miles and not at the same time of day. These random numbers fill air quality modeling functions without actually representing true results.</p>
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382	Air Quality	<p>The air quality assessment for impacts from carbon monoxide followed the U.S. Environmental Protection Agency guidelines in <i>Guideline for Modeling Carbon Monoxide from Roadway Intersections</i> (A-OAQPS, 1992). Inputs to the model were based on U.S. Environmental Protection Agency-recommended values or were selected to provide a conservative estimate of impacts. Modeling methodology and results were reviewed by the Federal Highway Administration, Arizona Department of Transportation, and Maricopa Association of Governments.</p> <p>Increases in traffic volumes attributable to a project do not necessarily result in an increase in emissions over time because the U.S. Environmental Protection Agency's emissions control regulations and fleet turnover also play a role. In the U.S. Environmental Protection Agency's MOVES model, emissions rates for mobile source air toxics drop by 80 to 90 percent between 2012 and 2025, and MOBILE6.2 estimated a similar reduction. The effects of this are apparent from the mobile source air toxics analysis conducted for the Final Environmental Impact Statement; in the mobile source air toxics study area, total mobile source air toxics emissions would decline by 57 to more than 90 percent even though traffic is expected to increase by 47 percent (Final Environmental Impact Statement Table 4-36 on page 4-82).</p>
383	Air Quality	<p>According to the 2013 Arizona Department of Transportation <i>Air Quality Assessment South Mountain Freeway 202L Draft Report</i>, review of wind data from the Gila River Indian Community monitoring site at St. Johns suggests that during the morning hours and associated with mountain-drainage air flows and stable atmospheric conditions, wind flows are from the southeast and follow the Gila River channel to the north. Locations to the east of St. Johns experience flow from the east to the lower elevations along the Gila River. During the warmer hours' improved mixing, flows typically follow the river channel and come from the north and northwest.</p> <p>Likewise, during a 1-month-long meteorological monitoring period (November 20, 2006, through December 21, 2006) at Pecos Road and 40th Street and a second 1-month-long monitoring period at Pecos Road and 24th and 40th streets (April 19, 2007, through May 21, 2007), winds during the morning hours typically were from the northeast. During the warmer hours, and with improved mixing, winds typically were from the west.</p>
384	Air Quality	At the request of (then) Arizona State Senator John Huppenthal, short-term monitoring of meteorological conditions at Pecos Road and 24th and 40th streets was conducted during 2006 and 2007. Results of this sampling and data from various Maricopa County Air Quality Department monitoring sites were included in the technical report for informational purposes only.
385	Air Quality	The Aircraft Communications Addressing and Reporting System data were not used for modeling; they were included for informational purposes only.

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385	<p>Any results derived from the ACARS data are incomplete, not relevant, and mislead the community with technical jargon trying to show justification of expected air quality concentrations for each build and no build situation. Not only is the data not taken from the freeway project area, the data is randomly gathered at different heights, locations, and times.</p>
386	<p>Notwithstanding that this NEPA process has taken over 12 years, ADOT has not conducted any studies on atmospheric and/or ambient quality/conditions in the Ahwatukee Foothills area. As a result, there is no valid baseline data to input into air quality models that predict how bad the pollution in the area would be. Sites listed for reference to determine air quality for the citizens are nowhere near the impacted area and should not be used to determine air quality north of the Pecos Road alignment. Similarly, there are no temperature soundings for accurate air shed profiling. There are no air toxics measurements taken to understand the current components of the ambient air quality, and there are no wind speed and direction instruments installed as necessary to apply good science for modeling. These wind speed and direction monitors should have been installed north of the Pecos Road alignment east and west throughout the Ahwatukee Foothills community and near South Mountain to show how the Ahwatukee Foothills air shed does not remove tail pipe emissions from the freeway, but actually washes pollutants to the west in the mornings, shifting north near noon, with later winds northeasterly. This normal wintertime pattern, known to all Arizona air quality technical persons, is not shown or reflected in the DEIS.</p>
387	<p>Furthermore, ADOT does not compare the results of their traffic modeling against actual data after freeways are built (1-11 through 1-20). Hence, there is no validation of their use of traffic modeling.</p> <p>The inescapable conclusion is that there is no established validity to the modeling used in the DEIS. Without model validity, there can be no P&N or other justification to support building the SMF.</p>
388	<p>Traffic Issues</p> <p>Traffic congestion at the proposed 59th Ave/I-10 interchange would make a new “Broadway Curve” traffic congestion disaster, not alleviate traffic congestion. This junction of the SMF with I-10 may have been conceived many years ago, but it is just another example of how ADOT has not used effective modeling. The current situation should have been foreseen long ago. Current traffic congestion between 59th and 51st Avenues on the I-10 during morning and evening rush hours is extreme. Yet there was no mention in the DEIS of the cumulative impacts and effects of traffic congestion at that proposed interchange.</p>
389	<p>Just as the junction of freeways at the Broadway Curve was not properly planned for and engineered, this new interchange at the SMF and I-10 promises to have the same type of traffic congestion problems because of poor planning. Let us not forget</p>

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386	Air Quality	<p>At the request of (then) Arizona State Senator John Huppenthal, short-term monitoring of meteorological conditions at Pecos Road and 24th and 40th streets was conducted during 2006 and 2007. Results of this sampling and data from various Maricopa County Air Quality Department monitoring sites were included in the technical report for informational purposes only.</p>
387	Air Quality	<p>The air quality assessment for impacts from carbon monoxide followed the U.S. Environmental Protection Agency guidelines in Guideline for Modeling Carbon Monoxide from Roadway Intersections (A-OAQPS, 1992). This is accepted methodology.</p>
388	Traffic	<p>Construction of the proposed freeway would include widening along Interstate 10 to facilitate entrance and egress of vehicles between the two freeways. Additional information related to the Interstate 10 modifications can be found in Figure 3-26, on page 3-49, and in Figure 3-29, on page 3-53 of the Draft Environmental Impact Statement. The design of the connection to Interstate 10 and the widening along Interstate 10 were developed in accordance with the Federal Highway Administration’s Interstate System Access Informational Guide and has received an initial determination of operational and engineering acceptability from the Federal Highway Administration.</p> <p>Detailed microsimulation models were developed for each of the action alternatives as well as for the No-Action Alternative. The results of the analysis concluded that the action alternatives would not have adverse impacts on traffic operational characteristics along Interstate 10 and would provide as good or better performance than that which would be anticipated with the No-Action Alternative.</p> <p>An assessment of future traffic conditions with and without the proposed freeway is presented in the Draft Environmental Impact Statement, beginning on page 3-27. The traffic conditions presented in these sections are consistent with the environmental impact analysis for elements such for as air quality and noise, and the results of those analyses can be found in their respective sections of Chapter 4 of the Draft Environmental Impact Statement.</p>
389	Traffic	<p>Construction of the proposed freeway would include widening along Interstate 10 to facilitate entrance and egress of vehicles between the two freeways. Additional information related to the Interstate 10 modifications can be found in Figure 3-26, on page 3-49, and in Figure 3-29, on page 3-53 of the Draft Environmental Impact Statement. The design of the connection to Interstate 10 and the widening along Interstate 10 were developed in accordance with the federal Highway Administration’s Interstate System Access Informational Guide and has received an initial determination of operational and engineering acceptability from the Federal Highway Administration.</p> <p>While the South Mountain Citizens Advisory Team recommended the W101 Alternative, all stakeholders' input was accounted for—including regional leaders, municipalities, members of the public, and members of the South Mountain Citizens Advisory Team—before identifying the W59 Alternative as the Preferred Alternative (see Draft Environmental Impact Statement pages 3-65 and 3-68). The Draft Environmental Impact Statement has detailed discussion regarding the relative merits and problems with the action alternatives evaluated in the Western Section.</p>

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	<p>that ADOT ignored the recommendation of the SMCAT in choosing the 59th Avenue alignment. We can only expect that the new interchange at 59th Avenue also would not be properly engineered to handle all the traffic.</p>
390	<p>The elimination of Pecos Road in building the SMF would be disastrous for local arterial traffic in Ahwatukee Foothills. Not only would there be no interchange at 32nd Street, there would also be no frontage road along the freeway. So Chandler Boulevard would become inundated with traffic, much as it was before Pecos Road was connected to the I-10.</p> <p>Also, the arterial streets north of Pecos, Liberty Lane and Lakewood Parkway, would become major East-West arterials in the area between Desert Foothills Parkway and 40th Street. Neither Liberty Lane nor Lakewood Parkway were designed for this. They provide access to 4 schools, including Desert Vista High School. Currently, the school bus traffic uses 32nd Street from Pecos Road to get to these schools. Without a SMF interchange at 32nd Street, this bus traffic would clog the already stressed arterials of Liberty Lane and Lakewood Parkway. High school traffic also includes a lot of student cars that would clog the arterials.</p>
391	<p>Furthermore, the elimination of the access to Pecos Road from near 27th Avenue (the road is currently called S. Chandler Boulevard) exacerbates an already difficult access problem for residents in that area. ADOT promised to pave W. Chandler Boulevard to provide residents access to Ahwatukee Foothills further east, but this by no means provides these residents with an acceptable access to/from their homes. Pecos Road currently provides their only access out of their housing area, and it is a direct connect to I-10. With the SMF, Chandler Boulevard would provide their only access out of their housing area, and it would provide a convoluted access for resident to either the SMF or I-10. Egress in case of emergency would be extremely limited.</p>
392	<p>The DEIS lacks a traffic study of the effect the SMF would have on local arterial streets in Ahwatukee Foothills. A study should have been done both for traffic patterns during construction of the SMF as well as patterns that would develop after the SMF would be completed.</p>
393	<p>The people in Laveen desperately need faster access to a freeway and they want the truck traffic off their local arterial streets. But they are currently being held hostage to the SMF, told that it is the only way they can get rid of the truck traffic on their streets and get faster access out of the area for themselves. This is not true. A spur highway to/from I-10 West could easily accomplish both of their objectives. It would also support the objective of getting faster access in/out of the 51st Avenue commercial area for the truck traffic. Yet the DEIS did not mention the consideration of this alternative. ADOT's reaction to such a suggestion has been that it "wouldn't complete the loop" and that it would not allow for O&D regional mobility. The "complete the loop" objective is absurd and the O&D objective gets to the heart of what PARC has said this freeway is all about from the beginning. Yet the truck</p>

Code	Issue	Response
390	Traffic	<p>The determination to not include an interchange at 32nd Street was made in coordination with the City of Phoenix (see Figure 3-8 on page 3-15 of the Final Environmental Impact Statement). The interchange would have displaced more than 100 homes and would have been located near an existing high school. The City recommended that, based on these impacts, the interchange be removed from the study. In 2006, the City of Phoenix conducted a traffic circulation study to evaluate the impacts of the proposed freeway on the local street system, including the shift of access to Foothills Reserve and Calabrea from Pecos Road to Chandler Boulevard. The City study found no adverse effects on the local street system from the freeway (see Appendix 3-1 in the Final Environmental Impact Statement).</p> <p>The traffic projections for Chandler Boulevard (see Figure 3-12, on page 3-29 of the Draft Environmental Impact Statement) do show a reduction with the proposed freeway when compared with conditions without the proposed freeway. The freeway construction staging plan for the area along Pecos Road would allow for keeping east-west travel open during construction. One side of the freeway would be constructed while traffic remained on Pecos Road. When complete, traffic would be shifted from Pecos Road to the new freeway. At that time, the other side of the freeway would be built. However, temporary detours may be needed during construction. (See page 3-27 of the Draft Environmental Impact Statement.)</p>
391	Traffic	<p>The determination to not include an interchange at 32nd Street was made in coordination with the City of Phoenix (see Figure 3-8 on page 3-15 of the Final Environmental Impact Statement). The interchange was evaluated but ultimately eliminated because of increased residential displacements and cost.</p> <p>The extension of Chandler Boulevard west of 19th Avenue is included in this project because reasonable access must be maintained to the neighborhoods at the western end of Pecos Road (see Figure 3-33, on page 3-57 in the Draft Environmental Impact Statement).</p> <p>Residents in this area would continue to have a direct connection to Interstate 10 by using the proposed freeway. The travel time savings as a product of using the South Mountain Freeway in comparison with use of Pecos Road would likely offset any additional travel time attributable to the shift in access to Chandler Boulevard.</p> <p>Emergency responders would address the construction of the proposed freeway by amending the local emergency response plan to include the facility.</p>
392	Traffic	<p>Existing traffic volumes on the City of Phoenix's streets are available at the City's Web site, <phoenix.gov/streets/traffic/volumemap>.</p> <p>In 2006, the City of Phoenix conducted a traffic circulation study to evaluate the impacts of the proposed freeway on the local street system, including the shift of access to Foothills Reserve and Calabrea from Pecos Road to Chandler Boulevard. The City study found no adverse effects on the local street system from the freeway (see Appendix 3-1 in the Final Environmental Impact Statement).</p>
393	Alternatives	<p>The need identified for the proposed action is to provide regional east-west mobility and to address existing and future transportation system deficiencies. While providing greater access to residents and businesses in Laveen Village to Interstate 10 (Papago Freeway) is a benefit of the proposed action, it is not a primary need identified for the proposed action.</p> <p>According to 23 Code of Federal Regulations §771.111(f)," the action evaluated in the environmental impact statement must connect logical termini and be of sufficient length to address environmental matters on a broad scope...". The proposed action should satisfy the project need and should be considered in the context of the local</p>

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	<p>bypass objective has always been downplayed by ADOT, even in the DEIS, in an attempt to mislead the public to bolster public approval of the project. Accordingly, the DEIS has not analyzed the improved O&D regional mobility that would result from a spur highway to/from I-10 West.</p>
394	<p>Hazardous Materials</p> <p>The DEIS, starting on page 152, states, "AFFECTED ENVIRONMENT</p> <p>A hazardous materials evaluation for the construction and operation of the proposed freeway was conducted to determine whether:</p> <ul style="list-style-type: none">➤ contaminated soils would be present near potential hazardous materials sites➤ underground storage tanks would need removal or relocation because of freeway construction➤ wells and dry wells would be present, providing unintended conduits for preexisting or accidental releases from the construction process to groundwater supplies➤ during construction activities, workers could encounter soil contaminated with hazardous materials that had not previously been identified"
395	<p>It doesn't mention the transportation of hazardous materials on the new freeway and their associated risks, or the fact that the area where the freeway would connect with I-10 West crosses a site that was identified in the 1980s as contaminated and added to the list of the state of Arizona's Water Quality Assurance Revolving Fund (WQARF), which is the state's equivalent of a Superfund Site. The site has known groundwater contamination and soil contamination.</p> <p>The introduction of hazardous materials and their associated risks into Ahwatukee Foothills by the proposed SMF and its truck traffic would be significant. There are no industries using and emitting toxic chemicals in Ahwatukee Foothills that have reporting requirements under either the Toxics Release Inventory of the Emergency Planning and Community Right to Know Act (EPCRA) or the reporting of fixed facility hazardous materials (chemical) inventories required under the emergency planning provisions of EPCA. The latter, Tier Two chemical inventory reports, are annually required, and are reported to the fire department of jurisdiction (Phoenix Fire Department), the local emergency planning committee (Maricopa County LEPC), and the state emergency response commission (AZSERC). (The requirement for retail gas stations to file Tier Two reports was removed many years ago as long as these stations are in compliance with their reporting under the regulations for underground storage tanks.)</p> <p>The Maricopa County LEPC and the AZSERC are the two emergency planning agencies tasked with developing and updating a comprehensive emergency</p>

Code	Issue	Response
393	Alternatives	area socioeconomics and topography, the future travel demand, and other infrastructure improvements in the area. A partial freeway from Interstate 10 (Papago Freeway) to Laveen Village is not feasible because it would not meet the proposed freeway's identified purpose and need.
394		Comment quotes the Draft Environmental Impact Statement.
395	Hazardous Materials	<p>The corridor analysis revealed sites that would need further assessment during the property acquisition phase of the project, if an action alternative were to become the Selected Alternative. The Arizona Department of Transportation employs a phased approach to site assessment that allows time for cleanup of any sites found to have hazardous waste issues. The project team concluded from the level of analysis conducted during the environmental impact statement process that the types of sites likely to be acquired contain common hazardous waste issues such as underground storage tanks, asbestos and lead paint in buildings, and other commonly found issues (see page 4-153 of the Draft Environmental Impact Statement). The Arizona Department of Transportation maintains a process for addressing these issues in accordance with all applicable environmental laws and regulations.</p> <p>Arizona highways, as are most highways across the United States, are open to all kinds of traffic, so long as the cargo being carried is in accordance with U.S. Department of Transportation regulations for the specific type of cargo. The Arizona Department of Transportation has a few locations in the state with hazardous cargo restrictions, but these restrictions are based on emergency response issues or roadway design limitations specific to that location. For example, the Interstate 10 Deck Park Tunnel has certain hazardous cargo transport restrictions because of the limited ability for emergency responders to address a hazardous materials incident in the tunnel. The South Mountain Freeway, if implemented, is expected to operate under the same rules as other similar facilities in the state; transport of hazardous cargo would be expected to be permissible (see text box on page 4-157 of the Final Environmental Impact Statement).</p> <p>The Arizona Department of Public Safety (which includes the State Highway Patrol) has primary responsibility for enforcing traffic laws. The Arizona Department of Public Safety also has primacy when calling in support for traffic accidents, including hazardous materials accidents (see text box on page 4-157 of the Final Environmental Impact Statement). The Arizona Department of Transportation maintains a list of contractors who provide emergency response services, as well as local municipalities whose fire and police departments operate in cooperation with the Arizona Department of Public Safety on incidents within their jurisdiction. Requirements for shippers are maintained by the Arizona Department of Transportation's Enforcement Compliance Division.</p> <p>The West Van Buren Water Quality Assurance Revolving Fund site was identified and considered during development of the Draft Environmental Impact Statement (see pages 4-97 and 4-153 of the Draft Environmental Impact Statement, and the Draft Initial Site Assessment prepared for the proposed project). These sites are primarily groundwater-impact sites, and groundwater is found at a depth of over 60 feet below the footprint of the Preferred Alternative. Given the separation distance between the adversely affected medium (groundwater) and the construction zone (near-surface in these locations), the project team determined that these sites would not pose a risk to construction or to the general public once the facility were completed. This assessment has been clarified in the Final Environmental Impact Statement on page 4-165.</p>

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	<p>bypass objective has always been downplayed by ADOT, even in the DEIS, in an attempt to mislead the public to bolster public approval of the project. Accordingly, the DEIS has not analyzed the improved O&D regional mobility that would result from a spur highway to/from I-10 West.</p> <p>Hazardous Materials</p> <p>The DEIS, starting on page 152, states, "AFFECTED ENVIRONMENT A hazardous materials evaluation for the construction and operation of the proposed freeway was conducted to determine whether:</p> <ul style="list-style-type: none">> contaminated soils would be present near potential hazardous materials sites> underground storage tanks would need removal or relocation because of freeway construction> wells and dry wells would be present, providing unintended conduits for preexisting or accidental releases from the construction process to groundwater supplies> during construction activities, workers could encounter soil contaminated with hazardous materials that had not previously been identified" <p>It doesn't mention the transportation of hazardous materials on the new freeway and their associated risks, or the fact that the area where the freeway would connect with I-10 West crosses a site that was identified in the 1980s as contaminated and added to the list of the state of Arizona's Water Quality Assurance Revolving Fund (WQARF), which is the state's equivalent of a Superfund Site. The site has known groundwater contamination and soil contamination.</p> <p>396 The introduction of hazardous materials and their associated risks into Ahwatukee Foothills by the proposed SMF and its truck traffic would be significant. There are no industries using and emitting toxic chemicals in Ahwatukee Foothills that have reporting requirements under either the Toxics Release Inventory of the Emergency Planning and Community Right to Know Act (EPCRA) or the reporting of fixed facility hazardous materials (chemical) inventories required under the emergency planning provisions of EPCA. The latter, Tier Two chemical inventory reports, are annually required, and are reported to the fire department of jurisdiction (Phoenix Fire Department), the local emergency planning committee (Maricopa County LEPC), and the state emergency response commission (AZSERC). (The requirement for retail gas stations to file Tier Two reports was removed many years ago as long as these stations are in compliance with their reporting under the regulations for underground storage tanks.)</p> <p>The Maricopa County LEPC and the AZSERC are the two emergency planning agencies tasked with developing and updating a comprehensive emergency</p>

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396	Hazardous Materials	<p>Arizona highways, as are most highways across the United States, are open to all kinds of traffic, so long as the cargo being carried is in accordance with U.S. Department of Transportation regulations for the specific type of cargo. The Arizona Department of Transportation has a few locations in the state with hazardous cargo restrictions, but these restrictions are based on emergency response issues or roadway design limitations specific to that location. For example, the Interstate 10 Deck Park Tunnel has certain hazardous cargo transport restrictions because of the limited ability for emergency responders to address a hazardous materials incident in the tunnel. The South Mountain Freeway, if implemented, is expected to operate under the same rules as other similar facilities in the state; transport of hazardous cargo would be expected to be permissible (see text box on page 4-157 of the Final Environmental Impact Statement).</p> <p>The Arizona Department of Public Safety (which includes the State Highway Patrol) has primary responsibility for enforcing traffic laws. The Arizona Department of Public Safety also has primacy when calling in support for traffic accidents, including hazardous materials accidents (see text box on page 4-157 of the Final Environmental Impact Statement). The Arizona Department of Transportation maintains a list of contractors who provide emergency response services, as well as local municipalities whose fire and police departments operate in cooperation with the Arizona Department of Public Safety on incidents within their jurisdiction. Requirements for shippers are maintained by the Arizona Department of Transportation's Enforcement Compliance Division.</p> <p>In the event of an incident with a hazardous materials issue on a State or federal highway, the emergency responders contact the Arizona Department of Transportation's Traffic Operations Center to report the incident. The Traffic Operations Center then contacts the Arizona Department of Transportation's Safety and Risk Management group, which responds to the accident scene and assesses needs in concert with the incident commander from the responding agency with jurisdiction. If requested, the Arizona Department of Transportation can assist cleanup activities by engaging specialty subcontractors with whom the Arizona Department of Environmental Quality has contracts for such support. The Arizona Department of Transportation's Safety and Risk Management group's charge is primarily public health protection, with cleanup support being secondary.</p>

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396	<p>response plan for Maricopa County and the state of Arizona, respectively. The plan, by statute, requires:</p> <p>"Each emergency plan shall include (but is not limited to) each of the following:</p> <p>(1) Identification of facilities subject to the requirements of this subchapter that are within the emergency planning district, identification of routes likely to be used for the transportation of substances on the list of extremely hazardous substances referred to in section 11002(a) of this title, and identification of additional facilities contributing or subjected to additional risk due to their proximity to facilities subject to the requirements of this subchapter, such as hospitals or natural gas facilities.</p> <p>(2) Methods and procedures to be followed by facility owners and operators and local emergency and medical personnel to respond to any release of such substances.</p> <p>(3) Designation of a community emergency coordinator and facility emergency coordinators, who shall make determinations necessary to implement the plan.</p> <p>(4) Procedures providing reliable, effective, and timely notification by the facility emergency coordinators and the community emergency coordinator to persons designated in the emergency plan, and to the public, that a release has occurred (consistent with the emergency notification requirements of section 11004 of this title).</p> <p>(5) Methods for determining the occurrence of a release, and the area or population likely to be affected by such release.</p> <p>(6) A description of emergency equipment and facilities in the community and at each facility in the community subject to the requirements of this subchapter, and an identification of the persons responsible for such equipment and facilities.</p> <p>(7) Evacuation plans, including provisions for a precautionary evacuation and alternative traffic routes.</p> <p>(8) Training programs, including schedules for training of local emergency response and medical personnel.</p> <p>(9) Methods and schedules for exercising the emergency plan.</p> <p>Due to the unique nature of Ahwatukee Foothills, which is a residential area, and not zoned for heavy industrial uses, few hazardous materials transportation issues and risks exist there because none of these chemicals, other than gasoline and diesel, are being transported into the area, other than incidentally adjacent on Interstate 10, which is east of the area. A catastrophic release of hazardous chemicals along the I-10 corridor would have only an indirect effect on Ahwatukee Foothills.</p>

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397	<p>To determine the additional risks of hazardous materials transportation, the Maricopa County LEPC and the AZSERC would also need and utilize hazardous materials commodity flow studies to determine the types and amounts of hazardous materials being transported through or within the county and/or state to meet their respective planning requirements. Of course, the AZSERC does exactly that periodically, and the data and emergency planning is updated. But that data and the relevant analysis is absent in the DEIS.</p>
398	<p>The planning for response to an incident involving the release into the environment of a hazardous material involves using Aerial Locations of Hazardous Atmospheres (ALOHA), RMP*Comp, and Computer Aided Management of Emergency Operations (CAMEO). All are USEPA approved and provided emergency planning screening tools. RMP*Comp is used to predict the effects of a release that would exceed the ALOHA model limit of six miles. The worst case scenario release for chlorine was the only hazardous material being transported on the highways that, in the event of a catastrophic release, would exceed the six-mile ALOHA modeling limit, so RMP*Comp is used to assess the radius of impact for the worst-case chlorine release. ALOHA, RMP*Comp, and CAMEO are all distributed by the USEPA and are software programs provided and periodically updated by USEPA to determine the distance from a release point where there would be a danger to human health and safety. ALOHA can also calculate the levels of a released chemical that could infiltrate nearby buildings, the levels of those chemicals that will likely be in these buildings, and the time it would take for the released chemical(s) to reach their maximum concentration.</p> <p>As stated in the reports of the various hazardous materials commodity flow studies conducted in Arizona, ALOHA modeling already indicates, "a catastrophic release of gasoline from a tanker truck could cause areas up to 1.0 mile away to be affected at LOC 3 (a concentration where the general population could experience severe health effects and death) and areas as far as 3.1 miles away to be affected at LOC 1 (enough to cause discomfort in the general population). Credible and catastrophic releases of sulfuric acid would create an evacuation radius of 0.5 miles from the highway and railroad." (LOC means level of concern; LOCs range from 3 down to 1.)</p> <p>Ahwatukee Foothills already has some emergency planning needs due to the transportation of gasoline into and within the area. There should already be planning for an incident involving gasoline within a mile of current arterial traffic, including Pecos Road. Schools within a mile of Pecos should have an evacuation plan.</p> <p>The proposed SMF would only add exponentially to emergency planning needs and risks as more truck traffic of this chemical and others that are potentially more dangerous in the event of a catastrophic release would be transported immediately adjacent to schools, parks, shopping areas, and other vulnerable facilities in Ahwatukee Foothills. The freeway would be the sole source of these new risks from a hazardous materials incident, thus this would be a very significant impact directly</p>

Code	Issue	Response
397	Hazardous Materials	The project team is aware of the Hazardous Materials Commodity Flow Studies that the Arizona State Emergency Response Commission maintains. These studies are used by emergency response planners (such as the Arizona State Emergency Response Commission statewide and the Maricopa County Local Emergency Planning Commission for Maricopa County) as one of the elements considered when developing emergency response plans. If the plan is amended, it is made available to the Arizona Department of Transportation.
398	Hazardous Materials	<p>According to 46 <i>Federal Register</i> 18026 (March 23, 1981), the environmental impact statement must discuss reasonably foreseeable actions. These are actions that are likely to occur or probable, rather than those that are merely possible. There are no requirements in 23 Code of Federal Regulations 771 Environmental Impact and Related Procedures or in the Federal Highway Administration Technical Advisory T 6640.8A Guidance for Preparing and Processing Environmental and Section 4(f) Documents to address releases of hazardous chemicals due to a transportation incident in National Environmental Policy Act documents for transportation projects like the proposed action. As discussed above, reasonably foreseeable actions are those that are likely to occur or probable, rather than those that are merely possible.</p> <p>If the proposed action is the Selected Alternative in the record of decision, planning for emergency situations would be initiated. If the plan is amended, it is made available to the Arizona Department of Transportation.</p>

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	caused by the freeway, and a full analysis of the risks and effects should have been examined in the NEPA process.
397	The data and calculations of risk and distance from certain chemicals carried on the highways are documented in the July 9, 2009, report, <i>The Hazardous Materials Commodity Flow Study Report I-19 Corridor from I-10 to Mexico Border, Arterial Highways and Railways, Pima and Santa Cruz Counties, Arizona</i> ; the October 30, 2006 report, <i>Hazardous Materials Commodity Flow Study Report I-8 and I-10 Corridors, Arterial Highways and Railways, Yuma, Maricopa, Pinal, Pima and Cochise Counties, Arizona</i> ; and the December 5, 2008 <i>Hazardous Material Commodity Flow Study I-10 Corridor from SR 85 to California</i> prepared for the AZSERC. Previous commodity flow study reports would show the same sorts of information.
399	<p>One piece of data that is missing is the Hazardous Materials Commodity Flow Study Report for the I-10 to I-8 to SR 85 to I-10 route that was selected as a truck bypass around 2006. (Part of the idea of this particular truck bypass was to route truck traffic away from the Phoenix metro area as a measure to reduce particulate matter air pollution.) According to ADOT, this also is part of the CANAMEX highway system that has been approved via treaties with Mexico and Canada, and this truck bypass has now been officially designated as the route of the CANAMEX.</p> <p>Clearly, the SMF DEIS should have studied or promulgated this data to determine the traffic of hazardous materials that could be expected to shift to the SMF. Even without this last bit of information, a close approximation should have been calculated and examined in the DEIS.</p>
400	HDR, the contractor for ADOT in the November 26, 2008, <i>SPR 624 Hazardous Materials Transportation in Arizona Literature Review with Findings Report</i> , would have reviewed all of this information, at a minimum. HDR is also the contractor for ADOT in the NEPA process for the SMF, and should have had access to this same information. There can be no valid reason for excluding any mention or analysis of the risks and additional planning from hazardous materials transportation in the SMF DEIS other than a deliberate exclusion.
401	From the beginning of the NEPA process regarding the SMF, Ahwatukee Foothills residents and others have consistently and vociferously raised concerns about the added risks to their community from the transportation of hazardous materials on the new SMF. In doing so they have consistently voiced concerns regarding the additional problems with hazardous materials response in the affected area, as well as evacuation and shelter in place issues. There is also a risk from the consequences of a hazardous materials transportation incident to the communities on the north side of the pass at South Mountain, and Laveen would be at a particularly heightened risk also. Therefore, the same types of impacts that threaten Ahwatukee Foothills would apply to these other communities, but at least these others have alternate escape routes that the community of Ahwatukee Foothills does not have.

Code	Issue	Response
399	Trucks	<p>The road network in the Maricopa Association of Governments travel demand model includes the Interstate 8 and State Route 85 corridor. So, while the roads are not in the Study Area for the proposed action, traffic and trip distributions along the corridor are included in the traffic analysis for the proposed action. Any traffic that would shift from the Interstate 8 and State Route 85 corridor to the proposed action would be included in the vehicle mix considered in the analysis.</p> <p>A truck driver traveling from Tucson to Los Angeles and choosing to use Interstate 10 and the proposed freeway would travel 15 miles less than one choosing to use the designated truck bypass along Interstate 8 and State Route 85. Choosing to travel on the proposed action versus Interstate 8 and State Route 85 would not translate to any substantial travel time benefits. Therefore, it is expected that “true” through-truck traffic (not having to stop in the metropolitan area) would continue to use the faster, designated, and posted bypass system of Interstate 8 and State Route 85.</p>
400	Hazardous Materials	The 2008 hazardous material report referenced in the comment was prepared to assist the Arizona Department of Transportation in refining its policies and process for determining hazardous materials routing in the state. It was a preliminary document and intended to form a basis of understanding about how other states’ planning processes address this issue. The report was not intended to provide specific recommendations for hazardous materials routing, but rather to provide the Arizona Department of Transportation with information to consider in making possible adjustments to its planning process. The recommendations of the report have been taken under advisement by the Arizona Department of Transportation.
401	Hazardous Materials	<p>According to 46 <i>Federal Register</i> 18026 (March 23, 1981), the environmental impact statement must discuss reasonably foreseeable actions. These are actions that are likely to occur or probable, rather than those that are merely possible. There are no requirements in 23 Code of Federal Regulations 771 Environmental Impact and Related Procedures or in the Federal Highway Administration Technical Advisory T 6640.8A Guidance for Preparing and Processing Environmental and Section 4(f) Documents to address releases of hazardous chemicals due to a transportation incident in National Environmental Policy Act documents for transportation projects like the proposed action. As discussed above, reasonably foreseeable actions are those that are likely to occur or probable, rather than those that are merely possible.</p> <p>If the proposed action is the Selected Alternative in the record of decision, planning for emergency situations would be initiated. If the plan is amended, it is made available to the Arizona Department of Transportation.</p>

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401	<p>As of 2010, the 35.8 square-mile community of Ahwatukee Foothills has a population of 77,249. So if there would be a catastrophic release from a 17-ton chlorine tanker along the Pecos Road alignment, almost all of these 77,249 would be at risk of death or severe injury. In Laveen, there are 35,502 residents who would be at a similar risk. There would also be risks to the residents of the Gila River Indian Community along the Pecos alignment. All of these above mentioned communities would be forever at risk of a very terrible, certain, and quick death from a chlorine release if this freeway gets built. All of these communities would have to be forever on hair trigger alert. They, as communities, would need periodic training and drills to protect them, as well as infrastructure in the form of siren systems and other alert systems, telephone ring down systems, and much more.</p>
402	<p>We know that over a hundred trucks per hour would be the number at the beginning of the freeway's opening, just from localized traffic information, but when the I-10 to I-8 to SR 85 to I-10 truck bypass is negated, there will be much more truck traffic. That number can be quantified, and that is something the DEIS should have done with the millions of dollars already spent. But HDR and ADOT skirted that by claiming in the DEIS that that information is not known and the impacts are unclear. That is absurd; that is precisely the sort of data that is quite available, and must be examined, studied, and analyzed.</p> <p>The fact that the proposed freeway would eliminate the exits from the community at 32nd Street and Pecos would only exacerbate an already difficult position that this community would be in if there were an evacuation or the need for a response to a catastrophic hazardous materials incident. Regular traffic is already voluminous at that intersection:</p> <ul style="list-style-type: none">• Pecos (west approach) - Total 22,313 veh/day (2012 count) including 11,727 westbound and 10,586 eastbound volumes.• Pecos (east approach) - Total 28,178 veh/day (2012 count) including 14,331 westbound and 13,847 eastbound volumes• 32nd Street (north approach) - Total 7,807 veh/day (2011 count) including 3,761 northbound and 4,406 southbound volumes. <p>With that access to Pecos Road being removed by the freeway, all of that traffic would have to find another way out and further clog and congest other exit routes. Yet there was no mention or analysis of these issues in the DEIS.</p>
403	<p>The October 30, 2006 report, <i>Hazardous Materials Commodity Flow Study Report I-8 and I-10 Corridors, Arterial Highways and Railways, Yuma, Maricopa, Pinal, Pima and Cochise Counties, Arizona</i>, also mentions the risk from a release of chlorine gas and the risks of a catastrophic release during a transportation incident. As stated, RMP*Comp is a USEPA approved emergency planning screening tool used when ALOHA predicts the effects of a release would exceed the ALOHA model limit of six miles. The worst-case scenario release for chlorine was the only material to exceed the six-mile ALOHA limit.</p>
404	

Code	Issue	Response
402	Trucks	The road network in the Maricopa Association of Governments travel demand model includes the Interstate 8 and State Route 85 corridor. So, while the roads are not in the Study Area for the proposed action, traffic and trip distributions along the corridor are included in the traffic analysis for the proposed action. Any traffic that would shift from the Interstate 8 and State Route 85 corridor to the proposed action would be included in the vehicle mix considered in the analysis. A truck driver traveling from Tucson to Los Angeles and choosing to use Interstate 10 and the proposed freeway would travel 15 miles less than one choosing to use the designated truck bypass along Interstate 8 and State Route 85. Choosing to travel on the proposed action versus Interstate 8 and State Route 85 would not translate to any substantial travel time benefits. Therefore, it is expected that “true” through-truck traffic (not having to stop in the metropolitan area) would continue to use the faster, designated, and posted bypass system of Interstate 8 and State Route 85.
403	Traffic	<p>The determination to not include an interchange at 32nd Street was made in coordination with the City of Phoenix (see Figure 3-8 on page 3-15 of the Draft Environmental Impact Statement). The interchange was eliminated based on undesirable residential displacements and cost.</p> <p>In 2006, the City of Phoenix conducted a traffic circulation study to evaluate the impacts of the proposed freeway on the local street system, including the shift of access to Foothills Reserve and Calabrea from Pecos Road to Chandler Boulevard. The City study found no adverse effects on the local street system from the freeway (see Appendix 3-1 in the Final Environmental Impact Statement).</p>
404	Hazardous Materials	The project team is aware of the Hazardous Materials Commodity Flow Studies that the Arizona State Emergency Response Commission maintains. These studies are used by emergency response planners (such as the Arizona State Emergency Response Commission statewide and the Maricopa County Local Emergency Planning Commission for Maricopa County) as one of the elements considered when developing emergency response plans. If the plan is amended, it is made available to the Arizona Department of Transportation.

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405	Hazardous Materials	<p>According to 46 <i>Federal Register</i> 18026 (March 23, 1981), the environmental impact statement must discuss reasonably foreseeable actions. These are actions that are likely to occur or probable, rather than those that are merely possible. There are no requirements in 23 Code of Federal Regulations 771 Environmental Impact and Related Procedures or in the Federal Highway Administration Technical Advisory T 6640.8A Guidance for Preparing and Processing Environmental and Section 4(f) Documents to address releases of hazardous chemicals due to a transportation incident in National Environmental Policy Act documents for transportation projects like the proposed action. As discussed above, reasonably foreseeable actions are those that are likely to occur or probable, rather than those that are merely possible.</p> <p>If the proposed action is the Selected Alternative in the record of decision, planning for emergency situations would be initiated. If the plan is amended, it is made available to the Arizona Department of Transportation.</p>
406	Hazardous Materials	<p>Stability data for the area are likely unavailable, but an “F” stability would probably occur only during the early morning hours and would be associated with drainage winds coming from the northeast that would carry the plume away from inhabited areas. Issues of a severe accident such as the one described exist for many portions of the Phoenix metropolitan area. Fast and effective defense response is critical in the emergency response plans prepared by emergency service providers and discussed on page 4-157 of the Final Environmental Impact Statement.</p>

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405	<p>going to be a match for a cloud of chlorine, and any evacuation, or rescue on any scale, after the arrival of the chlorine gas will be virtually impossible. Handicapped and elderly people, as well as children, would be at a particular disadvantage. People outside would have no place to go to for sheltering in place. Shelter in place strategies, i.e. having people shelter in a building, stop ventilation systems, and block up and seal all air flow, will have to be successful before the chlorine gas arrives. Otherwise, those sheltering will bottle themselves up with a harmful gas.</p> <p>ALOHA modeling indicates that certainly all buildings within a mile of the chlorine release from a 17-ton tanker truck would have such high levels of chlorine gas infiltrate into them that most people there would die, or be very severely injured. Some models put that circle of assured death at closer to two miles away. There are schools and residential areas on the north side of the Pecos Road alignment within a mile of the proposed SMF, and many more within two miles of the freeway alignment. There would be thousands of people at an extreme risk.</p>
407	<p>The prevailing winds push across GRIC land toward the north, toward South Mountain, and also to the west through the 51st Avenue pass. Chlorine fumes from an incident on the Pecos Road alignment will certainly be most likely to blow the cloud into all of Ahwatukee Foothills, then on to the GRIC at 51st Avenue, then into Laveen.</p>
405	<p>There is a pass at 51st Avenue where the proposed truck bypass/freeway is planned. If the chlorine incident happened at the 51st Avenue pass and/or Laveen, the one to two mile kill zone and six+ miles of harm would apply there with just a few minutes to take appropriate action to evacuate or shelter in place.</p> <p>There is the additional problem of handling the people outdoors at parks, bicycling, hiking, shopping, and other activities if such an incident occurred. Strategies would have to be determined well in advance. Law enforcement personnel and emergency responders would need to be trained, drilled, equipped properly, and otherwise prepared for this scenario. If the 17-ton tanker of chlorine empties in minutes, there won't be much the emergency responders can do to stop the leak, but patch kits are available for that purpose. A rupture or hole may be too large to patch, and that size of opening would vent all the chlorine anyway by the time any responders arrived. Limited freeway access and egress becomes a response hindrance also.</p> <p>One responder strategy would be to try to "knock down" the cloud of chlorine with water. To prepare for that, the freeway would have to have a hydrant system with enormous amounts of water and water pressure, as no fire truck would have enough water to last very long. All that water and chlorine would make plenty of hydrochloric acid. The hydrochloric acid would eat away and decay the responding vehicles and equipment, the concrete on the freeway, its culverts, degrade the asphalt pavement, and ruin any metal cables and metal where the acid solution washed to. The freeway would have to be designed so that such an incident would not also destroy it.</p>

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407	Air Quality	<p>According to the 2013 Arizona Department of Transportation <i>Air Quality Assessment South Mountain Freeway 202L Draft Report</i>, review of wind data from the Gila River Indian Community monitoring site at St. Johns suggests that during the morning hours and associated with mountain-drainage air flows and stable atmospheric conditions, wind flows are from the southeast and follow the Gila River channel to the north. Locations to the east of St. Johns experience flow from the east to the lower elevations along the Gila River. During the warmer hours' improved mixing, flows typically follow the river channel and come from the north and northwest.</p> <p>Likewise, during a 1-month-long meteorological monitoring period (November 20, 2006, through December 21, 2006) at Pecos Road and 40th Street and a second 1-month-long monitoring period at Pecos Road and 24th and 40th streets (April 19, 2007, through May 21, 2007), winds during the morning hours typically were from the northeast. During the warmer hours, and with improved mixing, winds typically were from the west.</p>

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408	<p>There would also be residual effects. The January 2005 chlorine disaster in Graniteville, South Carolina illustrates some of these. Following the chlorine disaster, Avondale Mills (textile company) officials had spent more than \$140 million on cleaning, repairs and damage mitigation from the textile mills machinery that was corroded so severely by the chlorine gas that it had to be replaced, only to find that new equipment brought to the plant quickly corroded because chlorine was still present and reacting with other agents.</p> <p>That the corrosive effects of the chlorine from such a large release would last so long needs to be taken into account in assessing the costs associated with such an incident. The chlorine reacts with moisture to form hydrochloric acid, but over time, one would expect that this would diminish. In assessing the damages from a large-scale chlorine release, emergency responders and emergency planning agencies should look for this lasting effect. The corrosive effects could harm pavement, concrete, industrial infrastructure, and even residential structures and the electrical wiring. A much more detailed decontamination, including pH samplings, should be undertaken in the recovery phase of operations to prevent such devastation.</p> <p>NEPA requires examination of cultural, social, and economic impacts, and the new hazardous materials traffic and risks caused by the SMF would certainly affect all of these topic areas.</p> <p>Despite all of this, there is nothing in the DEIS that even mentions the hazardous materials transportation and risks issue! Yet, it is evident that ADOT plans for hazardous materials being transported on this proposed highway. [Page 5-20].</p>
409	<p>Hazardous Materials has been mostly limited in the DEIS to a discussion of hazardous materials that might be encountered in the soils during construction. Yet, despite this alleged concern, the fact that the proposed path of the freeway crosses contaminated property near Interstate 10 and 55th Avenue is neither mentioned nor examined, much less the financial liability the taxpayers might be assuming by purchasing the contaminated property. That would certainly be an enormous economic impact. Since the 1980s, there has been well-documented groundwater contamination in the area around 51st avenue and Van Buren to 59th Avenue and Van Buren, enough so that it was added to the list of the state of Arizona's Water Quality Assurance Revolving Fund (WQARF), which is the state's equivalent of a Superfund Site.</p> <p>By purchasing this contaminated land for the freeway, the state of Arizona would assume the liability for the clean up of these contaminants, along with the liability for adverse health impacts suffered by workers in the area. This is a type of corporate welfare, as it would remove the liability costs from the various polluters and current property owners that have ground and groundwater pollution issues and transfer it to the people of Arizona.</p>

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408	Hazardous Materials	<p>According to 46 <i>Federal Register</i> 18026 (March 23, 1981), the environmental impact statement must discuss reasonably foreseeable actions. These are actions that are likely to occur or probable, rather than those that are merely possible. There are no requirements in 23 Code of Federal Regulations 771 Environmental Impact and Related Procedures or in the Federal Highway Administration Technical Advisory T 6640.8A Guidance for Preparing and Processing Environmental and Section 4(f) Documents to address releases of hazardous chemicals due to a transportation incident in National Environmental Policy Act documents for transportation projects like the proposed action. As discussed above, reasonably foreseeable actions are those that are likely to occur or probable, rather than those that are merely possible.</p> <p>If the proposed action is the Selected Alternative in the record of decision, planning for emergency situations would be initiated. If the plan is amended, it is made available to the Arizona Department of Transportation.</p>
409	Hazardous Materials	<p>The West Van Buren Water Quality Assurance Revolving Fund site was identified and considered during development of the Draft Environmental Impact Statement (see pages 4-97 and 4-153 of the Draft Environmental Impact Statement, and the Draft Initial Site Assessment prepared for the proposed project). These sites are primarily groundwater-impact sites, and groundwater is found at a depth of over 60 feet below the footprint of the Preferred Alternative. Given the separation distance between the adversely affected medium (groundwater) and the construction zone (near-surface in these locations), the project team determined that these sites would not pose a risk to construction or to the general public once the facility were completed. This assessment has been clarified in the Final Environmental Impact Statement on page 4-165.</p>

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410	<p>Noise pollution</p> <p>The DEIS cited an outdated noise abatement policy and included an incomplete review of the regulations regarding noise (page 4-80). In particular, the Quiet Communities Act of 1978, promoting the development of state and local noise control programs, should have been discussed. Further, not all receptors that could be impacted by noise from the SMF were identified and impacts predicted for. For example, effects on multiple schools located within 0.5 miles of the proposed SMF were not evaluated (page 4-84). Vibration from blasting is qualitatively discussed in the Topography, Geology, and Soils section (page 4-115) of the DEIS; however, vibration from non-blasting construction activities and from operational impacts is not discussed anywhere within the DEIS.</p> <p>The DEIS discusses the use of noise barriers as a primary means of noise mitigation (page 4-80). The use of noise barriers as proposed in the DEIS is unacceptable. The DEIS states that barriers would not be constructed higher than 20 feet because of cost, aesthetics, and constructability. This is as it should be. Yet in some areas, a 20-foot sound barrier would not achieve acceptable noise abatement (page4-90).</p> <p>The design of a depressed (below ground level) freeway has been rejected, in spite of the fact that this would provide substantial noise abatement. It appears that the SMF is being designed as the “Walmart of freeways” to keep the cost down, regardless of the negative impacts this would have on the communities affected. Raised freeway overpasses from a ground level freeway would propagate traffic noise and pollution at a greater distance.</p> <p>The only other noise mitigation strategy that was considered, according to the DEIS, is the use of rubberized asphalt, which isn’t even a proven strategy. Even to the extent that it works to reduce noise, it would not provide enough noise abatement to make the noise pollution levels acceptable at some locations along the proposed freeway route.</p> <p>Water and Soil Issues</p> <p>Concerns were raised to ADOT throughout the scoping process about the destruction of supply wells located along Pecos Road if the SMF were built along that alignment. ADOT appears to be aware of these concerns, as an attempt is made to directly address them on page 4-100 of the DEIS. Yet the analysis of wells used for water supply for the Foothills golf courses make use of information that is both outdated and erroneous. This leads to an insufficient analysis that does not make use of the “best available scientific and technical information.”</p> <p>ADOT identified that the Foothills Community Association has multiple sources of water available other than the supply well that would be lost because of the SMF. The DEIS identifies effluent, well water, and municipal water supplied by the City of Phoenix as being available. The wastewater treatment plant referenced in the DEIS</p>

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410	Noise	<p>The noise analysis has been updated for the Final Environmental Impact Statement using most recent Federal Highway Administration and Arizona Department of Transportation policy and traffic projections provided by the Maricopa Association of Governments in August 2013. This updated analysis begins on page 4-88 of the Final Environmental Impact Statement. No substantial differences between the analyses presented in the Draft and the Final Environmental Impact Statements resulted.</p> <p>As stated in the Council on Environmental Quality’s Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act, environmental impact statements should be analytic rather than encyclopedic [40 Code of Federal Regulations Part 1502.2(a)]. Those noise regulations of direct consequence to the proposed action were discussed. There are no federal requirements directed specifically to highway traffic induced vibration. All studies the highway agencies have done to assess the impact of operational traffic induced vibrations have shown that both measured and predicted vibration levels are less than any known criteria for structural damage to buildings. The Arizona Department of Transportation Noise Abatement Policy limits noise abatement walls to 20 feet in height.</p>
411	Drainage	<p>As noted on page 3-18 of the Draft Environmental Impact Statement, drainage served as the primary design constraint for the Pecos Road segment of the E1 Alternative. Assessments were performed to determine constructibility and effectiveness in avoiding or reducing impacts and to evaluate whether a depressed profile would generate other desired or undesired outcomes. Based on the results of these assessments, further design options were developed and refined in attempts to reduce impacts on the adjacent community. The modifications incorporated alternative drainage designs, use of retaining walls, and other features to reduce right-of-way requirements.</p>
412	Noise	<p>As disclosed on page 4-90 of the Draft Environmental Impact Statement, not all noise barriers would be capable of reducing traffic noise levels to levels recommended in the Arizona Department of Transportation’s Noise Abatement Policy. The Federal Highway Administration does not recognize rubberized asphalt as a noise abatement methodology; however, the Arizona Department of Transportation will use rubberized asphalt as the driving surface for the proposed freeway.</p>
413	Water Resources	<p>The comment is correct that wastewater effluent is not available as a replacement source and is not being used. The City of Phoenix did operate a wastewater reclamation facility in this area, but it was removed from service and demolished. The City of Phoenix still owns the property, but all facilities have been removed from the site. Thus, only two water sources are available for irrigation and lake supply for the Foothills Community Association: the well that would be acquired and potable water from the City of Phoenix. The discussion on page 4-100 of the Draft Environmental Impact Statement has been modified in the Final Environmental Impact Statement to reflect that reclaimed wastewater would not be available; however, the conclusion on page 4-100 is still appropriate. As stated on page 4-100 of the Draft Environmental Impact Statement, “In the event that well replacement were to be impossible, the Arizona Department of Transportation would still replace the water that would be lost through the acquisition.”</p>

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	<p>was removed by the City of Phoenix in the late 1990s. This key information, that effluent is completely unavailable, was reportedly made available to ADOT. It was not, however, used in the analysis of water supply availability.</p>
414	<p>The analysis of water replacement on page 4-100 is flawed in another way. The analysis is summarized as: "It is understood that finding a suitable location for a new well in this area may be difficult." This difficulty is dismissed by indicating that there are at least two other sources of water, which is erroneous. The only other source is municipal water, which would be prohibitively expensive. Further, the statement that drilling a new well may be difficult seriously downplays the importance of the wells that would be lost, the unique hydrogeology of the area, and the rarity of how productive these particular wells are.</p>
415	<p>In addition to being technically flawed, the analysis presented in the DEIS has been applied in an arbitrary manner. The detailed analysis focused solely on the Foothills Community Association and the potential loss of their wells. The DEIS does not analyze nearby entities that would experience the same impacts, or entities anywhere else along the freeway route. One specific example is the Lakewood Community Association. The supply wells currently used by the Lakewood community would be even more difficult to replace given their large pumping capacity.</p>
416	<p>The analysis of water quality is insufficient. While existing background water quality (page 4-97) is of interest, the more important concern is the potential for the proposed freeway route to impact known areas of contamination. This is not disclosed in the assessment of water resources. There are several basic and readily available data sources that should have been consulted for this analysis. At a minimum: (1) known Leaking Underground Storage Tank (LUST) sites, (2) known State WQARF or Federal CERCLA superfund sites, and (3) known or suspected landfills, either historic or active (the location along the Salt River makes this a particularly important item to assess in the DEIS).</p>
417	<p>There is no section within the DEIS that discussed the unique erosion issues that would be encountered when excavating South Mountain. Making deep cuts into three ridges of the mountain would create an enormous area for potential erosion of the mountain. Yet the DEIS just referenced the use of "erosion control." Erosion control for deep cuts into mountains must include special measures that not only mitigate the effects of erosion at the time the excavation occurs, but also the long-term and continuing effects of erosion. Without a plan and commitment to mitigate the continuing forces of erosion, initial efforts to control erosion will become ineffective within a relatively short time.</p>
418	<p>Regarding the DEIS component addressing the US Army Corps of Engineers section 404 of the Clean Water Act (page 4-112), the 401 certification by ADEQ is in jeopardy. EPA has found that ADOT has routinely failed to comply with contracts with FHWA, USACOE, ADEQ and USFS to maintain, limit or control sediment</p>

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414	Water Resources	<p>Page 4-100 of the Draft Environmental Impact Statement states that finding a suitable location for a new well in this area may be difficult. Productivity of the well in bedrock formations is primarily based on intercepting fractures, and that can be very difficult to do. The Arizona Department of Transportation is aware of the difficult conditions that exist in replacing wells in this area.</p> <p>The procedure identified on page 4-100 of the Draft Environmental Impact Statement defines the procedure that the Arizona Department of Transportation would use to replace impacted wells, and also identifies the general costs that the Arizona Department of Transportation would incur to replace the lost water sources.</p> <p>Depending on whether an action alternative were the Selected Alternative, it may be possible to keep the well in its current location, but move the well controls and associated piping to outside of the right-of-way. Such an analysis would be performed later in the design process.</p>
415	Water Resources	<p>Because of the public concern expressed during the environmental impact statement process, page 4-100 of the Draft Environmental Impact Statement focuses on the Foothills Community Association to provide more details on the well acquisition, condition assessment, and replacement process used by the Arizona Department of Transportation. This information applies equally to the Lakewood Community Association or any other acquired well in the area.</p>
416	Hazardous Materials	<p>The West Van Buren Water Quality Assurance Revolving Fund site was identified and considered during development of the Draft Environmental Impact Statement (see pages 4-97 and 4-153 of the Draft Environmental Impact Statement, and the Draft Initial Site Assessment prepared for the proposed project). These sites are primarily groundwater-impact sites, and groundwater is found at a depth of over 60 feet below the footprint of the Preferred Alternative. Given the separation distance between the adversely affected medium (groundwater) and the construction zone (near-surface in these locations), the project team determined that these sites would not pose a risk to construction or to the general public once the facility were completed. This assessment has been clarified in the Final Environmental Impact Statement on page 4-165.</p>
417	Geology	<p>Information gained through geotechnical investigations would be used to design the slopes to be stable and to protect against stormwater flows and related erosion. Technical reports addressing rock cut slope designs would be prepared as part of the preliminary and final geotechnical investigations of the selected freeway alignment.</p> <p>Stormwater flows and related erosion from excavated areas would be addressed by implementation of a Stormwater Pollution Prevention Plan and related best practices. Stormwater Pollution Prevention Plans are required on Arizona Department of Transportation construction projects to control and mitigate erosion and loss of soil from the project and off-site movement of eroded sediments.</p> <p>During construction, off-site impacts to soil from erosion related to the freeway construction project are not expected. Implementation of the Stormwater Pollution Prevention Plan and related best practices would keep eroded sediments on site for collection and replacement as appropriate. After construction, grading and drainage and landscape design components of the freeway system would act to control and mitigate erosion.</p>

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	<p>discharges into jurisdictional waters of the US. The Gila and Salt Rivers are waters of the US inside this planned project. EPA actions have created an environmental program inside of ADOT. This environmental program has failed to implement the most basic construction mitigations. Statewide highway construction along hillsides have created large and numerous rills (deep cuts down hillsides). These rills wash sediment into our waterways, polluting the ecosystem. ADOT management downplays environmental stewardship. ADEQ, Army Corps of Engineers, and FHWA do not conduct any inspections. Internal ADOT environmental staff does not influence ADOT management. FHWA does not provide funding for continued maintenance of hillside erosion after construction. Statewide, ADOT does not provide its maintenance highway workers funding to mitigate sediment discharges from hillside rills and failed sediment control features of the original construction best management practices. ADOT has failed to protect the environment in nearly all completed construction sites with the same terrain of the SMF. It would be expected that ADOT would not honor their own Statewide Individual Stormwater permit, allowing sediment discharges during and after construction of the freeway. (Haddow, <i>South Mountain Freeway 202 DEIS Comments Prepared for PARC et al</i>, 2013)</p>
419	<p>All of this points to an expected inadequate response by ADOT to water and soil issues that would arise during and after construction of the SMF. And the DEIS provides nothing to lead to a different conclusion.</p>
420	<p>South Mountain Preserve and Park</p> <p>The DEIS proposed that the SMF would cut through a part of South Mountain Preserve and Park. The DEIS said that the eminent domain claim on the Preserve and Park would be for just a small part of the whole, so it would be of little consequence. To some extent this is a matter of opinion. However, if someone claimed that they just wanted to cut a couple of toes off the foot of the Director of ADOT, his opinion would undoubtedly be that his toes are quite important. We also object quite strongly to the desecration of South Mountain Preserve and Park! It is a living entity that should remain whole, and it should not experience painful losses that result in ugly scars.</p> <p>We must ask, what part of the word “preserve” does ADOT not understand? The people of Phoenix created the Phoenix Mountain Preserves to do just what the word implies – preserve them. Further, South Mountain Park is the largest wilderness municipal park in this country – some claim in the world. The fact that it is large is what makes it a magnificent wilderness park. And since it is right in the city of Phoenix, it is readily accessible to all the residents of the Valley of the Sun. Recreation is one of the major draws bringing people to this Valley, both to vacation and to live. Yet ADOT indicates in the DEIS that this is of little consequence and implies that it is much more important for trucks to get to their destinations as directly as possible, in spite of any amount of damage they may do to our precious resources, including South Mountain.</p>

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418	Water Resources and Waters of the United States	Controlling and treating runoff is a normal function of the Arizona Department of Transportation projects. No evidence is offered to substantiate such statements. The U.S. Army Corps of Engineers, as a cooperating agency, has participated and contributed in each step of the environmental process. The agency has found the logical sequence of decision making to be sound and in line with National Environmental Policy Act requirements. The Arizona Department of Environmental Quality has also contributed to the process. Both agencies as referenced in the comment have oversight roles in project permitting as established in the Clean Water Act (Sections 401, 402, and 404). Extensive mitigation in accordance with the permitting requirements can be found in the <i>Water Resources and Waters of the United States</i> sections of Chapter 4 of the Final Environmental Impact Statement. The Arizona Department of Transportation is fully obligated and committed to implementation and adherence to those mitigation strategies.
419	Mitigation	If an action alternative is the Selected Alternative, the record of decision issued for the project will contain all mitigation measures to be implemented for the project. The Federal Highway Administration and Arizona Department of Transportation will commit to implementation of all mitigation measures in the record of decision.
420	Section 4(f) and Section 6(f)	<p>The acreage of parkland to be converted to a transportation use is reported on Draft Environmental Impact Statement page 5-14 in the section, <i>Direct Use</i>. Additional text on that page focuses on other concerns associated with the direct use of the park/preserve (see the sidebar on page 5-14, “<i>The South Mountains in Phoenix’s Sonoran Preserve System</i>”) as well as describing the importance of the park in the region.</p> <p>City of Phoenix planning efforts since the mid-1980s illustrate an awareness of the potential for the proposed freeway to affect Phoenix South Mountain Park/ Preserve. In 1989, the South Mountain Park Master Plan was adopted by the Phoenix City Council. The master plan shows the freeway alignment as adopted by the State Transportation Board in 1988. In 1990, the South Mountain Preserve Act was ratified by the Arizona Legislature. The Act did not apply to roadways through a designated mountain preserve if the roadway was in the State Highway System prior to August 15, 1990. The proposed freeway was in the State Highway System prior to 1990. Records prior to the Act suggest a primary reason for the exception was to allow the proposed freeway to go through Phoenix South Mountain Park/ Preserve (see Draft Environmental Impact Statement page 5-14). The project team examined alternatives to avoid the park, but did not identify any feasible and prudent alternatives to avoid impacts. The portion of the park that would be used for the proposed freeway would be 31.3 acres, or approximately 0.2 percent of the park’s approximately 16,600 acres (see pages S-39 and 5-31 of the Draft Environmental Impact Statement). The Arizona Department of Transportation continues to work with park stakeholders to minimize impacts and address concerns. Measures to minimize harm to the park were developed (see the Draft Environmental Impact Statement, starting on page 5-23).</p>

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421	<p>Let us not forget that South Mountain is home to many living species. The DEIS mentioned (Chapter 4) that ADOT was aware that the desert tortoise is a threatened species and that many animals and plants would be permanently affected by the SMF, particularly in South Mountain. However, their mitigation plan is basically to be careful to destroy as few of the living species and their habitat as possible. The SMF would try to put in replacement migration routes for South Mountain animals that migrate to and from the Sierra Estrella. And that's it. The desert tortoise population (especially sensitive since it is a threatened species) would just be diminished, as would its habitat and that of all the species that inhabit the western part of South Mountain.</p> <p>Additional issues that the DEIS does not consider include:</p> <ul style="list-style-type: none">• The Sonoran Desert was listed in 2011 as one of the 12 most threatened landscapes in the US by the Cultural Landscape Foundation. Further fragmentation of an endangered ecosystem would have a significantly negative impact.• The increase in fire danger would further threaten a desert ecosystem that has not evolved with fire.• A highway through the ecosystem would increase the types of invasive species and increase their spread because the highway would provide a corridor for their movement.• With the increase in pollutants, there would be an increase in the hazard to humans who hike and bike in South Mountain Park, particularly on the west end. The hazard is not only that the highway would increase the pollutants in the park but also that the activities of walking and bicycling increase exposure to air pollutants.• The increased air pollutants due to the proximity of the highway would also negatively affect many plants, whether airborne or in the soil.• South Mountain contains many iconic plants, such as ironwood, saguaro, Arizona Queen of the Night, elephant tree, ocotillo. Construction kills plants. Those that are removed to be replanted, such as saguaro, historically experience a very high mortality rate.• Specialized species such as elephant tree and saguaro will respond negatively due to loss of habitat.• The western part of South Mountain Park currently has a healthier ecosystem than the eastern or central part of the park because it is a more isolated area and those who use it don't typically abuse it. It provides a sense of wilderness not experienced in any other City Preserve. A highway through the western end of the park would destroy the wilderness and make it the least healthy part of the park.
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421	Biology, Plants, and Wildlife	<p>The section, <i>General Impacts on Vegetation, Wildlife, and Wildlife Habitat</i>, beginning on page 4-125 of the Draft Environmental Impact Statement, discloses by what means the proposed action and its alternatives would affect vegetation, wildlife, and wildlife habitat. A Biological Evaluation was submitted to the U.S. Fish and Wildlife Service, Arizona Game and Fish Department, and Gila River Indian Community Department of Environmental Quality that addressed threatened, endangered, and candidate species, including the Sonoran desert tortoise. The information used to prepare the analysis in the Draft Environmental Impact Statement (page 4-122) was based on 2011 information retrieved from the Arizona Game and Fish Department (Gopherus agassizii, draft unpublished abstract compiled and edited by the Heritage Data Management System, Phoenix). Current information on threats and connectivity strategies was included in the Biological Evaluation. The U.S. Fish and Wildlife Service concurred with the species determinations in the Biological Evaluation (see Appendix 1-1 of the Final Environmental Impact Statement).</p> <p>Connectivity is planned to allow wildlife movement beneath the freeway in multiuse crossings (see page 4-125 of the Draft Environmental Impact Statement). The Federal Highway Administration and Arizona Department of Transportation have committed to providing mitigation by including multifunctional crossing structures designed for wildlife and for limited human use as well as culverts designed for connectivity for smaller species. Wildlife-friendly design information would be considered during the design of drainage and crossing structures for the freeway (see <i>Mitigation</i>, beginning on page 4-138 of the Final Environmental Impact Statement).</p>
422	Biology, Plants, and Wildlife	<p>The comment reflects a concern associated with the cumulative impacts of the proposed action on habitat in the region. A discussion of cumulative impacts addressing this issue can be found in the section, <i>Secondary and Cumulative Impacts</i>, beginning on page 4-167 of the Draft Environmental Impact Statement. The proposed project is located primarily adjacent to already developed areas except for at the southwest end of the South Mountains. In this area, multifunctional crossing structures are planned at locations where natural movement corridors occur along major drainages (see pages 4-125, 4-126 and Figure 3-25 on page 3-47 of the Draft Environmental Impact Statement).</p>
423	Biology, Plants, and Wildlife	<p>The comment implies that the proposed action would be directly responsible for increased fire potential. While a new road facility could increase the chance of fires originating from cigarettes tossed out windows or from vehicles catching fire on the roadside, the Arizona Department of Transportation designs urban roadside landscaping to minimize the chance of roadside fires spreading beyond the right-of-way. Fires originating on urban highways and spreading to natural preserves is not an issue on similar facilities in the Phoenix area, such as State Route 51 and State Route 101L.</p>
424	Biology, Plants, and Wildlife	<p>The Arizona Department of Transportation regularly implements mitigation measures to control and minimize the presence of invasive and noxious species on its facilities and would do the same for this project, in compliance with Executive Order 13112. This requirement is described on page 4-119 of the Draft Environmental Impact Statement. This includes identifying, controlling, and monitoring for invasive species as well as prevention of their incidence in areas where they are not presently found. The Order also includes restoration of native plant species where invasive plant species are found.</p>

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	<p>Let us not forget that South Mountain is home to many living species. The DEIS mentioned (Chapter 4) that ADOT was aware that the desert tortoise is a threatened species and that many animals and plants would be permanently affected by the SMF, particularly in South Mountain. However, their mitigation plan is basically to be careful to destroy as few of the living species and their habitat as possible. The SMF would try to put in replacement migration routes for South Mountain animals that migrate to and from the Sierra Estrella. And that's it. The desert tortoise population (especially sensitive since it is a threatened species) would just be diminished, as would its habitat and that of all the species that inhabit the western part of South Mountain.</p> <p>Additional issues that the DEIS does not consider include:</p> <ul style="list-style-type: none">• The Sonoran Desert was listed in 2011 as one of the 12 most threatened landscapes in the US by the Cultural Landscape Foundation. Further fragmentation of an endangered ecosystem would have a significantly negative impact.• The increase in fire danger would further threaten a desert ecosystem that has not evolved with fire.• A highway through the ecosystem would increase the types of invasive species and increase their spread because the highway would provide a corridor for their movement.• With the increase in pollutants, there would be an increase in the hazard to humans who hike and bike in South Mountain Park, particularly on the west end. The hazard is not only that the highway would increase the pollutants in the park but also that the activities of walking and bicycling increase exposure to air pollutants.• The increased air pollutants due to the proximity of the highway would also negatively affect many plants, whether airborne or in the soil.• South Mountain contains many iconic plants, such as ironwood, saguaro, Arizona Queen of the Night, elephant tree, ocotillo. Construction kills plants. Those that are removed to be replanted, such as saguaro, historically experience a very high mortality rate.• Specialized species such as elephant tree and saguaro will respond negatively due to loss of habitat.• The western part of South Mountain Park currently has a healthier ecosystem than the eastern or central part of the park because it is a more isolated area and those who use it don't typically abuse it. It provides a sense of wilderness not experienced in any other City Preserve. A highway through the western end of the park would destroy the wilderness and make it the least healthy part of the park.
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425	Air Quality	The contribution of mobile sources (traffic) to air quality in the Study Area is addressed beginning on page 4-68 of the Final Environmental Impact Statement. The carbon monoxide and particulate matter (PM ₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones.
426	Air Quality	The contribution of mobile sources (traffic) to air quality in the Study Area is addressed beginning on page 4-68 of the Final Environmental Impact Statement. As noted on page 4-69 of the Final Environmental Impact Statement, secondary standards are promulgated to minimize environmental and property damage. Many of the criteria pollutants do not have secondary standards. Primary and secondary standards for particulate matter (PM ₁₀) are identical; no threshold is established by the U.S. Environmental Protection Agency for carbon monoxide (CO). The carbon monoxide and particulate matter (PM ₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones (see discussion beginning on page 4-68 of the Final Environmental Impact Statement).
427	Biology, Plants, and Wildlife	Improved techniques and knowledge regarding the transplanting of protected native plants in Arizona have increased survival rates. The Arizona Department of Transportation has considerable experience transplanting native plants protected by the Arizona Native Plant Law and has experienced a high survival rate. The Arizona Department of Transportation has conducted studies on the best methods to use for transplanting desert species, particularly ironwood trees and saguaros, and was honored by the American Society of Landscape Architects in 2012 for this work. The research results have been incorporated in the procedures for plant salvage for Arizona Department of Transportation projects and throughout the industry. Reports on the research findings are available from the Arizona Department of Transportation Research Center at <azdot.gov/planning/research-center/research/research-reports>.
428	Biology, Plants, and Wildlife	Transplanting of protected native plants has been highly successful with application of proper techniques. The loss of habitat is not expected to cause individual nearby plants to respond.
429	Biology, Plants, and Wildlife	Information regarding the context and attributes of the South Mountains is described in the Draft and Final Environmental Impact Statements. The habitat characteristics of the Study Area, including those habitats within the park/ preserve, can be found in the section, <i>Biological Resources</i> , beginning on page 4-125 of the Final Environmental Impact Statement.

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430	All these negative effects on the South Mountain Preserve are completely unacceptable to all who care about the preservation of the Phoenix mountains – and that is the majority of the population of Phoenix.
431	<p>Environmental Justice</p> <p>Three fundamental environmental justice principles apply to the transportation project development process:</p> <ul style="list-style-type: none">to avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populationsto ensure the full and fair participation by all potentially affected communities in the transportation decision-making processto prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations."
432	<p>The JATAP monitoring at the St. Johns monitoring site on the GRIC found certain air toxics attributed to "mobile sources," or vehicular traffic burning hydrocarbons. These findings of the air toxics were alarmingly high, many times the "accepted" cancer risk standard set by USEPA.</p> <p>The St. Johns monitoring site's highest toxic findings:</p> <ul style="list-style-type: none">formaldehyde at 34 times this standard;benzene at 8 times this standard;1,3 butadiene at 7.5 times this standard; andacetaldehyde at 3.4 times this standard. <p>The JATAP study also found that three other air toxics associated with transportation exhaust, Ethylbenzene, m,p-Xylene, and o-Xylene, were detected over 50% of the time at levels above the Maximum Daily Limit set by the state health department.</p> <p>Residents of the GRIC living around and adjacent to the monitoring site are currently being subjected to all of these carcinogens, not just one. And if a freeway were to be built near this monitoring site on the GRIC, there would be more air toxics in addition to the ones detected at levels that far exceed the USEPA risk standard.</p> <p>One of the JATAP's findings presented to the EPA National Air Monitoring Conference in November 2006 was, "Annual average concentrations of formaldehyde, acetaldehyde, benzene and 1,3 butadiene were on the high end of the range reported in EPA funded assessments of other US cities." This finding relates to any future proposed freeway in the JATAP study area, which includes in entirety the route of the proposed SMF. It also has huge environmental justice implications</p>

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430	Section 4(f) and Section 6(f)	Chapter 5, <i>Section 4(f) Evaluation</i> , and the section, <i>Cultural Resources</i> , beginning on page 4-140 of the Final Environmental Impact Statement, disclose the potential impacts on the collective resources associated with the South Mountains. Use of the mountains for the purposes of the proposed freeway represents two-tenths of one percent of the total mountain range. Since 1988, and as part of this environmental impact statement process, several measures have been undertaken and will be undertaken to further reduce effects on the mountains. These measures, including narrowing the design footprint, acquiring replacement land immediately adjacent to the mountains, and the provision of highway crossings, are outlined in the <i>Cultural Resources</i> and <i>Biological Resources</i> sections of Chapter 4 and in text beginning on page 5-23 of the Final Environmental Impact Statement.
431	Environmental Justice and Title VI	<p>The section entitled <i>Title VI and Environmental Justice</i>, beginning on page 4-29 in the Draft Environmental Impact Statement, presents acceptable methods, data, and assumptions to assess the potential for disproportionately high and adverse effects from the proposed action on environmental justice populations and disparate impacts to populations protected under Title VI. Based upon the content of the section, no such effects would result from the action alternatives.</p> <p>In light of comments received on the Draft Environmental Impact Statement, the above-referenced conclusions were confirmed in the preparation of the Final Environmental Impact Statement. To provide further clarity, the discussions of environmental justice and Title VI were separated and additional text explaining the relationship of environmental justice and Title VI to various environmental elements was added throughout Chapter 4, <i>Affected Environment</i>, <i>Environmental Consequences</i>, and <i>Mitigation</i>, as exemplified by the inserted text on page 4-29 of the Final Environmental Impact Statement.</p>
432	Air Quality	40 Code of Federal Regulations Section 1500.1(b) also directs the Federal Highway Administration to focus its National Environmental Policy Act analysis and documentation on issues that are truly significant to the action in question. In the context of mobile source air toxics, the Federal Highway Administration must consider whether changes in mobile source air toxics emissions attributable to a project have the potential for significant health risk. Using cancer risk as an example, the U.S. Environmental Protection Agency estimates that the overall risk of cancer in the United States is approximately 330,000 in a million, and that air toxics (from all sources) are responsible for a risk of approximately 50 in a million. In its most recent mobile source air toxics rule-making, the U.S. Environmental Protection Agency estimated mobile source air toxics cancer risk, after implementation of emissions controls, at approximately 5 in a million (or 0.0015 percent of overall cancer risk from any cause). For the South Mountain Freeway project, the mobile source air toxics emissions analysis for the Study Area found little difference in total annual emissions of mobile source air toxics emissions between the Preferred and No-Action Alternatives (less than a 1 percent difference) in 2025 and 2035. With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions (see discussion beginning on page 4-77 of the Final Environmental Impact Statement). Like most highway projects that have received a mobile source air toxics emissions analysis, the South Mountain Freeway project would result in a negligible change to a very small component of overall cancer risk, and this risk is declining regardless of alternative.

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433	<p>because, in other words, some of the worst air in the country, in terms of air toxics, was found in the JATAP study, and the high readings on the GRIC are among these highest readings.</p> <p>So the air toxics are already worse than many other areas of the United States, and the proposed freeway would add even more. Obviously, adding more vehicular traffic emissions by building a freeway where there had not been one would add to this toxic burden. Yet despite its claims about environmental justice, these real environmental problems were not mentioned in the DEIS, nor was a plan to mitigate these impacts ever mentioned.</p> <p>The JATAP also showed serious air toxics problems at the West and South Phoenix monitoring sites, and these monitoring sites are in the midst of other low-income and ethnic minority communities, mostly of Hispanic origin. These would also be exacerbated by the addition of another source of mobile toxics. The JATAP and its results mentioned "toxic hot spots near freeways" specifically because freeways cause toxic hotspots for air toxics.</p> <p>It appears that ADOT and HDR would sacrifice human health and safety to accomplish their goal of building the SMF, and would rather see people on the GRIC, West and South Phoenix suffer and die from cancer than simply conduct an honest and objective NEPA process. That appears to be a violation of the civil rights of the GRIC residents near the St. Johns JATAP monitoring site, as well as the low-income and ethnic minority communities of West and South Phoenix.</p> <p>The failure to properly analyze and/or address the air toxics information from the JATAP study is a deliberate violation of the very Environmental Justice issues that ADOT and FHWA claim to be observing. One must conclude that the DEIS itself is an extreme example of environmental injustice, despite its assertions.</p> <p>The GRIC areas along the proposed freeway have extremely limited access and egress. A chlorine incident and the potential consequences of that are detailed in the comments regarding the DEIS' complete failure to even mention the risks from a hazardous materials incident, much less mitigating the risks. Such an incident would certainly doom the residents of the GRIC around the 51st Avenue pass. This is another severe example of environmental injustice, as no consideration is made for the lifestyle of the Native Americans on the GRIC, and no plan or means for preparing for response to such a disaster is even mentioned in the DEIS.</p> <p>There is mention in the DEIS of a myriad of organizations and tribes that were approached about the DEIS, but not one environmental justice group in South or West Phoenix, or on the GRIC, were ever contacted. That has to be a deliberate step, as some of these groups even tried to approach ADOT and were rebuffed.</p>
434	

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432 (cont.)		Summary information about the findings of the Joint Air Toxics Assessment Project study is provided as background information in the Draft and Final Environmental Impact Statements, but the study itself is not relevant to the type of analysis done pursuant to the Federal Highway Administration’s mobile source air toxics guidance, which is an emissions analysis. Monitored ambient concentrations of mobile source air toxics (the focus of the Joint Air Toxics Assessment Project) do not inform this type of analysis. While monitoring data can be useful for defining current conditions in the affected environment (to the extent that the monitoring data are current), they don’t tell us anything about future conditions, or the impacts of the project itself, which is why an emissions analysis was performed. The mobile source air toxic analysis presented beginning on page 4-77 of the Final Environmental Impact Statement is an estimated inventory of mobile source air toxic emissions for the entire Study Area for 2025 and 2035. This approach was used because the inventory estimate accounts for changes in traffic and emissions on all roadways affected by a proposed project, and would, therefore, be a more reliable predictor of changes in exposure to mobile source air toxics.
433	Title VI and Environmental Justice	For the South Mountain Freeway project, the mobile source air toxics emissions analysis for the Study Area found little difference in total annual emissions of mobile source air toxics emissions between the Preferred and No-Action Alternatives (less than a 1 percent difference) in 2025 and 2035. With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions (see discussion beginning on page 4-77 of the Final Environmental Impact Statement). Like most highway projects that have received a mobile source air toxics emissions analysis, the South Mountain Freeway project would result in a negligible change to a very small component of overall cancer risk, and this risk is declining regardless of alternative.
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435	Title VI and Environmental Justice	According to 46 <i>Federal Register</i> 18026 (March 23, 1981), the environmental impact statement must discuss reasonably foreseeable actions. These are actions that are likely to occur or probable, rather than those that are merely possible. There are no requirements in 23 Code of Federal Regulations 771 Environmental Impact and Related Procedures or in the Federal Highway Administration Technical Advisory T 6640.8A Guidance for Preparing and Processing Environmental and Section 4(f) Documents to address releases of hazardous chemicals due to a transportation incident in National Environmental Policy Act documents for transportation projects like the proposed action. As discussed above, reasonably foreseeable actions are those that are likely to occur or probable, rather than those that are merely possible. If the proposed action is the Selected Alternative in the record of decision, planning for emergency situations would be initiated. If the plan is amended, it is made available to the Arizona Department of Transportation. The referenced populations are no more uniquely exposed to such an occurrence than other population segments within the Study Area.
436	Public Involvement	<p>The Arizona Department of Transportation and Federal Highway Administration provided equal access to the public participation process to the Gila River Indian Community and its members. The Arizona Department of Transportation and Federal Highway Administration solicited input from the Gila River Indian Community and other Native American tribes and tribal members and considered fully the substantive input and comments that were received.</p> <p>Chapter 2 of the Final Environmental Impact Statement is dedicated to explaining the Gila River Indian Community outreach undertaken for the project. The Gila River Indian Community was provided the same opportunities to participate in the project as all other populations and agencies.</p> <p>The Arizona Department of Transportation advertisement efforts of the public hearing and public forums are documented in Chapter 6 of the Final Environmental Impact Statement beginning on page 6-23. The Gila River Indian Community Communication and Public Affairs Office informed the Arizona Department of Transportation that all communication and distribution of informational materials on Gila River Indian Community land would be handled by the Communication and Public Affairs Office. Advertisement text regarding the project, the public comment period, the public hearing, and the various ways for the public to submit comments regarding the South Mountain Freeway Draft Environmental Impact Statement was given to the Gila River Indian Community’s Public Information Officer at the</p>

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437	<p>Religious and Racial Discrimination and Civil Rights Violations</p> <p>Throughout the DEIS, it is acknowledged that the GRIC and other native American tribes hold <i>Muhadagi Doog</i> as a sacred site. From the actual language of the DEIS: "The South Mountains are highly valued and considered sacred by some Native American communities. The Community, which includes the Akimel O'odham (River Pima) and Pee Posh (Maricopa) tribes, and other Native American entities—including the Colorado River Indian Tribes and three O'odham groups: the Salt River Pima-Maricopa Indian Community, the Ak-Chin Community, and the Tohono O'odham Nation—consider the South Mountains to play a role in their cultures, identities, histories, and oral traditions."</p> <p>There is plenty of correspondence in the DEIS and its Appendices in which the GRIC repeatedly asserts and reminds ADOT of this, to no avail. ADOT plans to blast <i>Muhadagi Doog</i>.</p> <p>If we were to take a look at the same issue and frame it as a danger to a sacred site that plays a role in cultures, identities, histories, and oral traditions of a white, European-based religion, such as the Roman Catholic Church, we can illuminate how this is clearly religious discrimination, and likely racial discrimination. If Rome, Italy decided there needed to be a freeway that would go through the Vatican and take out just a very small part of the Sistine Chapel, that would be unthinkable to people of the Roman Catholic faith worldwide. Think of the outrage and outcry such a proposal would muster!</p> <p>So what is the difference between the Roman Catholics' beliefs, and <i>Muhadagi Doog</i> and the "Native American entities?" Aside from the obvious differences in the race and number of people who practice the religions, the Sistine Chapel is located in Vatican territory. The Vatican is a separate political entity as is the GRIC, so the Vatican can prevent Rome from putting a highway through its territory just as the GRIC can prevent ADOT from putting one through its territory. But the borders of Indian Reservations were arbitrarily determined by white men, and South Mountain didn't happen to end up on the GRIC. So the only recourse of the Gila River and other tribes is to remind ADOT that South Mountain is sacred to them. ADOT acknowledges this but it suits their purpose to say they will just "mitigate it" as they build the SMF.</p> <p>This attitude and planned action deliberately and intentionally violates the civil rights of the "Native American entities." In a 1979 consultation on the issue, the United States commission on civil rights defined religious discrimination in relation to the civil rights guaranteed by the Fourteenth Amendment to the United States Constitution. [Section 1. All persons born or naturalized in the United States, and subject to the jurisdiction thereof, are citizens of the United States and of the State wherein they reside. No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property,</p>
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436 (cont.)		<p>Transportation Technical Team meeting on April 30, 2013. Two advertisements regarding the public hearing, information regarding the location and availability of the Draft Environmental Impact Statement, and a map of the alternatives was placed in the May 2013 monthly issue of the <i>Gila River Indian News</i>.</p> <p>The Arizona Department of Transportation Community Relations distributed electronic notices (e-newsletters) through the Government Delivery system to over 12,000 constituents who voluntarily signed up for project alerts along Interstate 10 (Papago, Maricopa, and Santan Freeways). These electronic notices included notice of availability of the Draft Environmental Impact Statement (distributed on April 26, 2013); date of the public hearing (distributed on May 10, 2013); dates of the community forums (distributed on May 29, 2013); and notification in June regarding the close of the Draft Environmental Impact Statement public comment period. In addition, anyone who had attended a previous meeting regarding the proposed action and signed in received all of this information mailed individually. On May 6, 2013, 73,564 mailers were distributed to addresses within the Study Area.</p> <p>The Arizona Department of Transportation provided vouchers for public hearing parking and for public transit to the hearing. For the first time in the State's history, a shuttle bus to the hearing was provided from six locations in the Phoenix area, including two on the Gila River Indian Community (Komatke Boys & Girls Club and the Governance Center in Sacaton). All ads provided telephone numbers and electronic contact information regarding information on the shuttle schedules and pick-up locations.</p>
437	Cultural Resources	<p>The cultural and religious places of importance, like the South Mountains, are acknowledged in the Draft Environmental Impact Statement in several locations, notably pages 4-132 and 5-26. The proposed project would accommodate and preserve (to the fullest extent possible from the available alternatives) access to the South Mountains for religious practices. A very small portion of the mountain would be impacted by the proposed freeway (less than 0.03 percent of the total area). Although the Draft Environmental Impact Statement describes the impact on the South Mountains as adverse, Native Americans would not be kept from practicing their beliefs, access to the mountain would be maintained, and mitigation measures would be implemented based on input from members of the Gila River Indian Community.</p>
438	Cultural Resources	<p>Since the beginning of the environmental impact statement process, the Federal Highway Administration and Arizona Department of Transportation have been carrying out cultural resources studies and engaging in ongoing, open consultation with the Gila River Indian Community Tribal Historic Preservation Office regarding the identification and evaluation of places of religious and cultural importance to the tribe that may be adversely affected by the proposed freeway. Such places are referred to as traditional cultural properties. As a result of these discussions and of studies conducted by the Gila River Indian Community's Cultural Resource Management Program, the Gila River Indian Community has identified traditional cultural properties that are eligible for listing in the National Register of Historic Places and that could be affected by construction of the proposed freeway. The traditional cultural properties identified are culturally important to other Native American tribes as well. For more discussion of traditional cultural properties, see the section, <i>Cultural Resources</i>, beginning on page 4-140 of the Final Environmental Impact Statement and pages 5-26 through 5-28.</p>

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438	<p>without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws.]</p> <p>As for racial discrimination, the equal protection clause was originally added to deal with the lack of equal protection provided by law to all in the course of administering justice in the states that had Black codes.</p> <p>The United States commission on civil rights noted, "Whereas religious civil liberties, such as the right to hold or not to hold a religious belief, are essential for Freedom of Religion (in the United States secured by the First Amendment), religious discrimination occurs when someone is denied "the equal protection of the laws, equality of status under the law, equal treatment in the administration of justice, and equality of opportunity and access to employment, education, housing, public services and facilities, and public accommodation because of their exercise of their right to religious freedom."</p>
439	<p>Also, the American Indian Religious Freedom Act (AIRFA) is a US federal law and a joint resolution of Congress that was passed in 1978. It was created to protect and preserve the traditional religious rights and cultural practices of American Indians, Eskimos, Aleuts and Native Hawaiians. These rights include, but are not limited to, access of sacred sites, repatriation of sacred objects held in museums, freedom to worship through ceremonial and traditional rites, including within prisons, and use and possession of objects considered sacred. The Act required policies of all governmental agencies to eliminate interference with the free exercise of Native religion, based on the First Amendment, and to accommodate access to and use of religious sites to the extent that the use is practicable and is not inconsistent with an agency's essential functions. It also acknowledged the prior violation of that right.</p>
440 439	<p>Clearly, the No Build Alternative is the only viable option that does not constitute a violation of the 14th Amendment to the Constitution and a violation of the AIRFA as any freeway alternative proposed in the DEIS of the SMF requires blasting away part of <i>Muhadagi Doog</i>.</p> <p>Fiscal Impacts</p> <p>While the SMF would have little positive economic benefit for the state or its residents, it would have adverse economic impacts for numerous reasons, including:</p> <ul style="list-style-type: none">• The loss of approximately one billion dollars in Federal Highway funds at least once right away, and possibly many times later on, because the increase in air pollution would cause exceedences of required standards• The cost of constructing the SMF, which would end up being far more than the two billions dollars currently predicted by ADOT because of all the issues not properly analyzed in the DEIS• The loss of value to State Trust Land 620• The loss of taxes from destroyed homes• The loss of revenue from affected HOAs

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438 (cont.)		Section 106 of the National Historic Preservation Act requires a government-to-government relationship between the Federal Government and Indian tribes as described beginning on page 4-140 of the Final Environmental Impact Statement. Section 106 requires that federal agencies take into account the effects of their undertakings on historic properties. This process requires consultation with tribal authorities. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. The consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Register of Historic Places eligibility recommendations (including traditional cultural properties), project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.
439	Cultural Resources	<p>The American Indian Religious Freedom Act, 42 United States Code Section 1996, provides a policy statement of the United States to "protect and preserve for American Indians their inherent right of freedom to believe, express, and exercise the traditional religions of the American Indian . . . including but not limited to access to sites, use and possession of sacred objects, and the freedom to worship through ceremonials and traditional rites."</p> <p>The Arizona Department of Transportation and Federal Highway Administration complied with the policy stated in the American Indian Religious Freedom Act throughout the environmental impact statement process, as evidenced by consultation efforts, mitigation measures, and a discussion of cultural resources issues in the Draft Environmental Impact Statement. The study would not violate the American Indian Religious Freedom Act because, as stated above, members of the Gila River Indian Community would not be prohibited from continuing to practice their beliefs even if the project goes forward because access to the mountain would be maintained, impacts would be mitigated based on input by the Gila River Indian Community and others, and only a small fraction of the mountain would be affected.</p>
440	Purpose and Need	The No-Action Alternative would not satisfy the purpose and need of this important regional transportation project. The E1 Alternative, designed to mitigate impacts as discussed in the Draft Environmental Impact Statement, would not violate the American Indian Religious Freedom Act or the Fourteenth Amendment.

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	<p>without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws.]</p> <p>As for racial discrimination, the equal protection clause was originally added to deal with the lack of equal protection provided by law to all in the course of administering justice in the states that had Black codes.</p> <p>The United States commission on civil rights noted, "Whereas religious civil liberties, such as the right to hold or not to hold a religious belief, are essential for Freedom of Religion (in the United States secured by the First Amendment), religious discrimination occurs when someone is denied "the equal protection of the laws, equality of status under the law, equal treatment in the administration of justice, and equality of opportunity and access to employment, education, housing, public services and facilities, and public accommodation because of their exercise of their right to religious freedom."</p> <p>Also, the American Indian Religious Freedom Act (AIRFA) is a US federal law and a joint resolution of Congress that was passed in 1978. It was created to protect and preserve the traditional religious rights and cultural practices of American Indians, Eskimos, Aleuts and Native Hawaiians. These rights include, but are not limited to, access of sacred sites, repatriation of sacred objects held in museums, freedom to worship through ceremonial and traditional rites, including within prisons, and use and possession of objects considered sacred. The Act required policies of all governmental agencies to eliminate interference with the free exercise of Native religion, based on the First Amendment, and to accommodate access to and use of religious sites to the extent that the use is practicable and is not inconsistent with an agency's essential functions. It also acknowledged the prior violation of that right.</p> <p>Clearly, the No Build Alternative is the only viable option that does not constitute a violation of the 14th Amendment to the Constitution and a violation of the AIRFA as any freeway alternative proposed in the DEIS of the SMF requires blasting away part of <i>Muhadagi Doog</i>.</p> <p>Fiscal Impacts</p> <p>While the SMF would have little positive economic benefit for the state or its residents, it would have adverse economic impacts for numerous reasons, including:</p> <ul style="list-style-type: none">• The loss of approximately one billion dollars in Federal Highway funds at least once right away, and possibly many times later on, because the increase in air pollution would cause exceedences of required standards• The cost of constructing the SMF, which would end up being far more than the two billions dollars currently predicted by ADOT because of all the issues not properly analyzed in the DEIS• The loss of value to State Trust Land 620• The loss of taxes from destroyed homes• The loss of revenue from affected HOAs
441	
442	

Code	Issue	Response
441	Economics	<p>In 2004, the City of Phoenix hired Crystal and Company to perform an analysis of the fiscal, economic, and social impacts of three potential alignments for the South Mountain Freeway. Relative to the Preferred Alternative (W59 and E1 Alternatives), the analysts estimated that, at build-out, the proposed freeway would create over 86,400 jobs and result in annual sales and property tax receipts in excess of \$86.5 million. The study estimated that build-out would take approximately 20 years from freeway completion.</p> <p>The traveling public would also benefit from the proposed freeway. When considering travel time savings, this benefit averages approximately \$200 million per year between 2020 and 2035 (see Table 4-27 on page 4-67 of the Final Environmental Impact Statement).</p>
442	Alternatives	<p>The contribution of mobile sources (traffic) to air quality in the Study Area is addressed beginning on page 4-58 of the Draft Environmental Impact Statement. The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations,increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones; therefore, no federal funding would be jeopardized.</p> <p>Cost estimates for the proposed freeway, as described beginning on page 3-59 of the Draft Environmental Impact Statement, were developed in accordance with accepted engineering practices by professional engineers. The Arizona Department of Transportation, Federal Highway Administration, Maricopa Association of Governments, and their consultants have peer-reviewed the proposed project's cost estimates in terms of both the quantities and unit costs used in the estimates. In each case, the estimates were found to be reasonable and accurate.</p> <p>The Arizona State Land Department would be compensated for the land acquired as part of freeway construction. The remaining land would continue to be valuable and might have increased value with the improved access provided by the proposed freeway.</p> <p>Impacts on property and sales tax revenues are quantified in the section, <i>Economic Impacts</i>, beginning on page 4-46. These impacts would be inconsequential when considered in the context of total tax revenues the City of Phoenix now collects and anticipates collecting in the future.</p> <p>Homeowners associations would be compensated for property acquired for construction of the freeway in accordance with State law.</p> <p>The cost of relocating utilities is included in the total costs presented in the Draft Environmental Impact Statement.</p> <p>It is assumed the reference to the superfund site is to the West Van Buren Water Quality Assurance Revolving Fund site. This site would not be affected by construction of the freeway.</p> <p>The Arizona Department of Transportation is experienced with handling drainage and erosion because they are important issues on every construction project. To minimize these issues, standard practices would be employed with construction, operation, and maintenance of the proposed freeway.</p> <p>Maintenance costs are considered in the project development and are planned in the Arizona Department of Transportation's budget.</p>

Code	Comment Document
	<ul style="list-style-type: none">• The cost of moving utilities from Pecos Road• The cost of cleaning up one superfund site• The cost of constantly dealing with issues related to drainage and erosion• The cost of maintaining the freeway
443	<p>Overall Impact on Quality of Life</p> <p>The negative impact on the community of Ahwatukee Foothills cannot be overstated. The SMF would destroy the type of community that it currently is – one known for peace and quiet. The community has historically experienced a low crime rate, and this would be radically changed upward. Since Ahwatukee Foothills terrain rises away from Pecos Road, views and noise will affect homes up to one mile north of Pecos. Because of the traffic problems that would occur from forcing so much more traffic on arterial streets, response time of police and fire units would suffer significantly. Top-rated schools would very likely be downgraded because of a change in the character of the region.</p>
444	<p>Hundreds of people use Pecos Road for training, cycling, running, skating, etc. Pecos Road is also the site of an annual Senior Olympics Cycling event. They would all experience a loss of recreational opportunities.</p>
445	<p>During times of freeway accidents or maintenance, commercial vehicles, including hazmats, in addition to passenger vehicles would be routed onto adjacent neighborhood arterial streets.</p> <p>Overall, the impact of the SMF would have very little positive effect on traffic, air pollution, or people in the region. It would provide the people of Laveen and the O&D trucks in the area around 51st Avenue a conduit to I-10, but this could be accomplished by just building a spur freeway from I-10 West to Laveen. On the other hand, the overall negative effects of the SMF would be extreme for the GRIC, Ahwatukee Foothills, South Mountain, and the environment. This demands a selection of the No Build option for the SMF.</p> <p>Respectfully submitted,</p> <p>Patricia K. Lawlis 16426 S 2nd Place Phoenix, AZ 85048 President, Protecting Arizona’s Resources & Children (PARC) Member, Phoenix Mountains Preservation Council (PMPC) Member, Sierra Club Member, Gila River Alliance for a Clean Environment (GRACE)</p>

Code	Issue	Response
443	Alternatives	<p>While the E1 Alternative is adjacent to largely residential areas of Ahwatukee Foothills Village (to the north), a freeway has been planned in this location for many years (see Final Environmental Impact Statement pages 4-17 and 4-21). Where existing residential uses are adjacent to the proposed freeway, noise mitigation would be implemented according to Arizona Department of Transportation policy (see page 4-91 of the Draft Environmental Impact Statement). The proposed freeway would not adversely affect north-south access because the land immediately south of Pecos Road is Gila River Indian Community land, with no existing north-south access. (See the E1 portion of Table 4-9, on page 4-27 Draft Environmental Impact Statement.)</p> <p>While the City of Phoenix Police Department reported in 2005 that it did not have any statistics specific to crime adjacent to freeways, it did note that based on its experience there does not appear to be a correlation between crime rates and freeways.</p> <p>Average daily traffic volumes on freeways and arterial streets are projected to increase substantially in and adjacent to the Study Area between 2010 and 2035. Contrary to the statement in the comment, the Draft Environmental Impact Statement notes that the proposed freeway would avert the congestion anticipated on arterial roads. As noted in the Draft Environmental Impact Statement, “The No-Action Alternative would not alleviate projected increases in traffic volumes and congestion on the Interstate and regional freeway systems or on the local street network by the design year 2035. It would instead, lead to worsening traffic congestion and substantial related impacts” (see page S-8 of the Draft Environmental Impact Statement).</p> <p>There is no evidence that the proposed facility would cause people to leave the area. The regions’ benefits would remain, and improved access to residences and businesses would make them more desirable.</p>
444	Alternatives	<p>The main line of the E1 Alternative would not have a bicycle route as part of the design. Continuous east-west riding would be possible in the neighborhoods adjoining the alternative and along Chandler Boulevard.</p>
445	Traffic	<p>Emergency responders would address the construction of the proposed freeway by amending the local emergency response plan to include the facility.</p>

Code	Comment Document
	<div><ul style="list-style-type: none">• The cost of moving utilities from Pecos Road• The cost of cleaning up one superfund site• The cost of constantly dealing with issues related to drainage and erosion• The cost of maintaining the freeway</div> <div><p>Overall Impact on Quality of Life</p><p>The negative impact on the community of Ahwatukee Foothills cannot be overstated. The SMF would destroy the type of community that it currently is – one known for peace and quiet. The community has historically experienced a low crime rate, and this would be radically changed upward. Since Ahwatukee Foothills terrain rises away from Pecos Road, views and noise will affect homes up to one mile north of Pecos. Because of the traffic problems that would occur from forcing so much more traffic on arterial streets, response time of police and fire units would suffer significantly. Top-rated schools would very likely be downgraded because of a change in the character of the region.</p><p>Hundreds of people use Pecos Road for training, cycling, running, skating, etc. Pecos Road is also the site of an annual Senior Olympics Cycling event. They would all experience a loss of recreational opportunities.</p><p>During times of freeway accidents or maintenance, commercial vehicles, including hazmats, in addition to passenger vehicles would be routed onto adjacent neighborhood arterial streets.</p><p>Overall, the impact of the SMF would have very little positive effect on traffic, air pollution, or people in the region. It would provide the people of Laveen and the O&D trucks in the area around 51st Avenue a conduit to I-10, but this could be accomplished by just building a spur freeway from I-10 West to Laveen. On the other hand, the overall negative effects of the SMF would be extreme for the GRIC, Ahwatukee Foothills, South Mountain, and the environment. This demands a selection of the No Build option for the SMF.</p><p>Respectfully submitted,</p><p>Patricia K. Lawlis 16426 S 2nd Place Phoenix, AZ 85048 President, Protecting Arizona’s Resources & Children (PARC) Member, Phoenix Mountains Preservation Council (PMPC) Member, Sierra Club Member, Gila River Alliance for a Clean Environment (GRACE)</p></div>

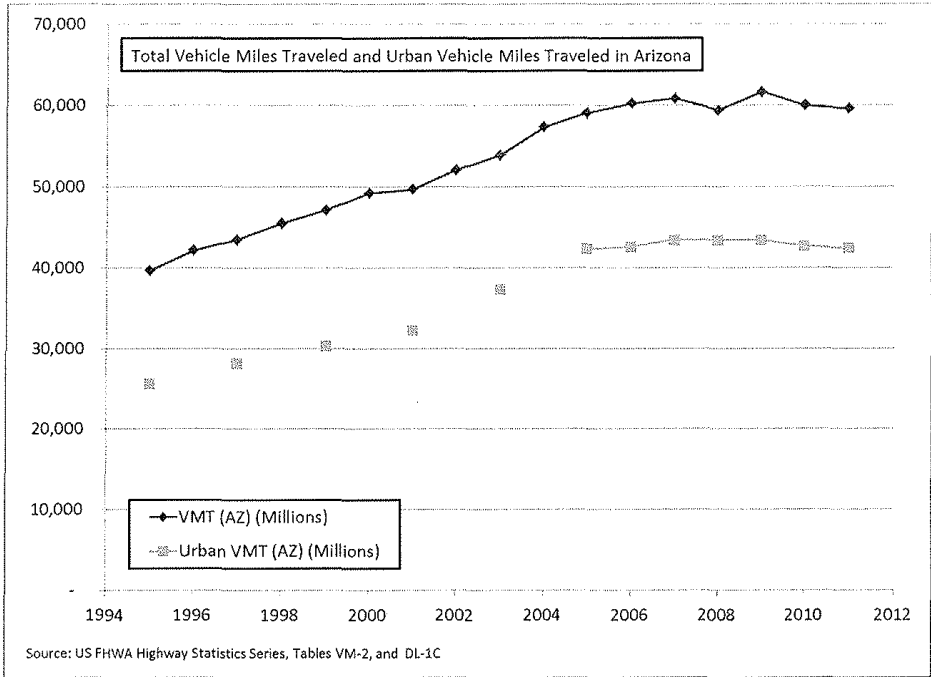
Code	Issue	Response
446	Alternatives	<p>The benefits of the proposed freeway in comparison with the No-Action Alternative are described throughout the Draft and Final Environmental Impact Statements.</p> <p>According to 23 Code of Federal Regulations §771.111(f),” the action evaluated in the environmental impact statement must connect logical termini and be of sufficient length to address environmental matters on a broad scope...”. The proposed action should satisfy the project need and should be considered in the context of the local area socioeconomics and topography, the future travel demand, and other infrastructure improvements in the area. A partial freeway from Interstate 10 (Papago Freeway) to Laveen Village is not feasible because it would not meet the proposed freeway’s identified purpose and need.</p> <p>The No-Action Alternative is included for detailed study in accordance with National Environmental Policy Act requirements to compare beneficial and adverse impacts of the action alternatives with those benefits and consequences (adverse impacts) of not proceeding with one of the action alternatives. (Impacts can occur through choosing to do nothing.) The No-Action Alternative would not satisfy the purpose and need of the proposed action (see page 3-40 of the Draft Environmental Impact Statement).</p> <p>The Arizona Department of Transportation, with concurrence from the Federal Highway Administration, identified the W59 and E1 Alternatives as the Preferred Alternative.</p>

Code	Comment Document
447	<p>Comment 1.</p> <p>Figure 1-4 and MAG’s travel projections seem to be just linear extensions of long-term trends. But trends in the last decade show stagnation in VMT growth even with population and before the economic downturn. The three figures below show the actual travel trends in Arizona and the United States since 1995. Note that stagnation in travel and declines of nearly 10% in per capita and per driver travel began before the 2008 recession. Recent data show little evidence of recovery in both total and urban travel in Arizona and show a continued decline in travel per capita. If these last decade’s actual trends are projected out, there would be much slower growth in VMT in the long run. Thus, we strongly question the basic assumption upon which the entire proposed project rests – continued strong growth in vehicle travel. In fact, we must also question what data was used to develop the trend lines shown in Figure 1-4, since there has been no increase in VMT in Arizona in nearly seven years. It would appear that only the high growth years up until the mid-2000s were used, which seems highly questionable and inaccurate. With a small adjustment in projected growth, following more closely recent trends, we suspect much of the growth in congestion used to justify the project would be erased.</p> <p>Source: US FHWA Highway Statistics Series, Tables VM-2, and DL-1C</p>

Code	Issue	Response
447	Purpose and Need	<p>The information presented in Figure 1-4 and the complementary Figure 1-6 are based on historic Census data and Maricopa Association of Governments socioeconomic projections. The information is for Maricopa County, not Arizona and not the United States. The historical growth in the Maricopa Association of Governments region is discussed in the Draft Environmental Impact Statement, beginning on page 1-5. The critical factors such as available land, mild climate, affordable cost of living, and employment opportunities that led to the historical growth rates in the region remain unchanged.</p> <p>In Maricopa County, daily vehicle miles traveled levels increased by almost 2 percent between 2011 and 2012 and the 2012 daily vehicle miles traveled is approaching the prerecession peak in 2007. (<i>Source: Arizona Department of Transportation Multimodal Planning Division Highway Performance Monitoring System Data for the calendar years 2012 and 2011</i>).</p> <p>The analyses in the Draft Environmental Impact Statement used socioeconomic and traffic projections at the regional analysis zone and traffic analysis zone levels. At the time of publication of the Draft Environmental Impact Statement, Census 2010-based socioeconomic data at the regional analysis zone and traffic analysis zone levels had not been adopted by the Maricopa Association of Governments and were not available to the project team. Therefore, the data used in the Draft Environmental Impact Statement were the most appropriate information available.</p> <p>The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future.</p>

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Key Travel Variables - Changes since 1995 (1995 = 1)

Year	VMT (AZ)	Population (AZ)	VMT/Capita (AZ)	Urban VMT (AZ)	VMT/Driver (AZ)	VMT (US)	Population (US)	VMT/Capita (US)
1995	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1997	1.1	1.1	1.0	1.1	1.0	1.0	1.0	1.0
1999	1.2	1.2	1.0	1.2	1.0	1.0	1.0	1.0
2001	1.3	1.3	1.0	1.3	1.0	1.0	1.0	1.0
2003	1.4	1.4	1.0	1.4	1.0	1.0	1.0	1.0
2005	1.5	1.5	1.0	1.5	1.0	1.0	1.0	1.0
2007	1.6	1.6	1.0	1.6	1.0	1.0	1.0	1.0
2009	1.7	1.7	1.0	1.7	1.0	1.0	1.0	1.0
2011	1.8	1.8	1.0	1.8	1.0	1.0	1.0	1.0

Source: US FHWA Highway Statistics Series, Tables VM-2, and DL-1C

448

Comment 2

Figure 1-2 – Many of the “Existing freeways” were under construction or still in planning? (SR-202, northern parts of 101?)

449

Comment 3

Figure 1-5. Are 2035 projections for population locations/growth based on actual permitting of housing units, or just on land potentially available for development?

450

Comment 4

Figure 1-7. How do the growth projections depend on the project implementation? Meaning, without the freeway, congestion in the west valley may limit growth there. Does housing permits in the west valley assume the freeway will be built? Just because they assumed there would be congestion relief doesn't mean the freeway needs to be built. Without the freeway, growth will just happen somewhere

Code	Issue	Response
448	Purpose and Need	While portions of State Route 202L (Red Mountain and Santan freeways) were not completed in 2003, they would be completed prior to the start of the planning horizon for the <i>Regional Transportation Plan</i> (2006 to 2026). Therefore, they were considered existing facilities during the development of the <i>Regional Transportation Plan</i> .
449	Purpose and Need	The 2035 projections for population are from the Maricopa Association of Governments socioeconomic projections. These projections are adopted by the Maricopa Association of Governments Regional Council to support transportation studies such as the South Mountain Freeway Draft Environmental Impact Statement. Projections are based on regional growth control totals allocated to subregions based on planned land use and existing land use patterns. Basing 2035 population on actual permitting of housing units would not provide an accurate picture of future population for the horizon year, as permits are typically acquired at the time of construction.
450	Purpose and Need	Growth projections for 2035 are not predicated on specific transportation improvements; rather, they are based on future land use plans, as envisioned by their respective jurisdictions. With few exceptions, land in the Study Area is privately owned; zoning requests to develop private land are typically based on these land use plans. In Phoenix in particular, development is occurring regardless of the proposed freeway. Not building the proposed freeway would not likely cause development to go elsewhere, and congestion on the arterial street network and existing freeways would continue to worsen with the No-Action Alternative.

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	<p>else. With the freeway, on the other hand, may induce cities to permit more housing in outlying areas, which may reduce the project’s effectiveness (induced demand).</p>
451	<p>Comment 5</p> <p>Table 3-2. Valley Metro is reportedly studying a light rail connection from Ahwatukee to Central Phoenix via Central south to Baseline to 48th Street south. The current project site is here: http://www.valleymetro.org/projects_and_planning/project_detail/south_central</p> <p>This doesn’t mention the extension south to Ahwatukee, but there are rumors it could eventually make that connection.</p>
452	<p>Comment 6</p> <p>Table 3-2 and Page 3-6. The Phoenix General Plan is being currently updated from the year-2000 general plan (the last one approved). It may include significant transit oriented land use requirements. ADOT just completed a study which showed that land use can have a very significant impact on travel. http://www.ssti.us/wp/wp-content/uploads/2012/05/AZ-LandUseandTrafficCongestion2012.pdf</p>
453	<p>Comment 7</p> <p>Table 3-2. The non-freeway alternatives may each alone not have a large potential, but there may be synergistic effects between them when deployed together. For instance, TDM programs, along with new transit options may reinforce each other.</p>
454	<p>Comment 8</p> <p>Figure 1-1 – missing outline of South Mountain park preserve.</p>
455	<p>Comment 9</p> <p>Page 3-34. “Time savings would be experienced during peak travel times of the day. Taken individually, savings may not appear to be substantial, but when considered in the context of the hundreds of thousands of drivers, each day, over the course of numerous years, the cumulative time savings would be substantial.” Models show very small improvements in travel time for the average driver. To each driver the time savings is so small that it can hardly be called a real, measurable, benefit. The “total time savings” over the entire population is meaningless, since two people’s time savings can’t add up to be used for any benefit.</p>
456	<p>Comment 10</p> <p>The section on fiscal impacts of the project, beginning on page 4-47, discusses changes in the tax base due to the conversion of land from tax-generating to transportation right of way. Another economic</p>

Code	Issue	Response
451	Alternatives	The project referenced is in study phases at Valley Metro. The project, as defined, would extend to Baseline Road.
452		Comment noted.
453	Alternatives	As noted in Table 3-2, “ <i>Nonfreeway Alternatives Considered and Reasons for the Elimination from Further Study</i> ,” elimination would not preclude the use of these elements in combination with the freeway mode.
454	Alternatives	It is not necessary to show the outline of Phoenix South Mountain Park/Preserve in the referenced figure because the map is a depiction of the Study Area and the regional context of the project.
455	Alternatives	The referenced information as presented in the Draft Environmental Impact Statement is based on analytical results.
456	Neighborhoods/Communities	A review of the literature reveals few detailed and comprehensive analyses of the relationship between the transportation infrastructure and residential property values (Transportation Research Record: Journal of the Transportation Research Board, No. 2174, Transportation Research Board of the National Academies, Washington, D.C., 2010, pages 138–47; “Impact of Highways on Property Values: Case Study of the Superstition Freeway Corridor”). A recent study by the California Department of Transportation concluded that freeway facilities did not substantially affect sales prices in residential areas adjacent to the facility. The study concluded that it is the visibility of the freeway that may influence selling price and not distance or noise. As a result, the researchers generally concluded that the more the visibility of a new freeway is reduced, the less it would determine the sales price of homes sold in the area.

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	<p>impact of the freeway will be a de-valuation of residential properties near the right of way due to environmental nuisances (noise, air quality). We would like to see an estimate of this loss in property values and subsequent loss in tax base.</p> <p>[NOTE: ADOT could respond that there are also increases in property values due to the freeway that they are not taking into account. But, since we are interested in negative impacts, there is still a need to account for declines in property values.]</p>

Code	Issue	Response

Code	Comment Document
	<div><p><u>Additional Comments</u></p><p>Three</p><p>Comments on DEIS Discussion of Section 4(F) of the Transportation Act</p></div>

Code	Issue	Response

Code	Comment Document
457	<p>COMMENTS ON DEIS DISCUSSION OF SECTION 4(F) OF THE TRANSPORTATION ACT</p> <p>The South Mountain 202 Draft EIS Section 4(f) Evaluation has not adequately analyzed Section 4(f) resources in SMPP, specifically the trails which are in the western end of the study area. It has erroneously dismissed Section 4(f) resources and has neglected the identification of other Section 4(f) resources.</p> <p><u>Improper Elimination of a Section 4(f) Resource from the DEIS</u></p> <p>The following section demonstrates how the DEIS erroneous disqualification Section 4(f) resources (trails) by applying the wrong information, having a lack of knowledge of the project area and the City of Phoenix.</p>
458	<p>In Appendix 5-1, on page A586, the DEIS attempts to disqualify the Section 4(f) trails in the SMPP by quoting a Goal from the Circulation Element of the General Plan: “Since approximately 40 percent of all trips are less than two mile in length, bicycling and walking can help relieve roadway congestion”. The DEIS continues to state that since the General Plan indicates that pedestrian trails maintained by the City of Phoenix are used for transportation and that they are not primarily recreational.</p> <p>It is incorrect to select the Circulation Element to qualify if the trails are for pedestrian or recreational use. The Circulation Element refers to trail/paths on the City Circulation (streets/roads) System. The trails in South Mountain are not on roads or sidewalks and not part of the Circulation Element, they are in the park and are strictly recreational, they do not serve a transportation purpose. Thus they remain Section 4(f) resources to be analyzed for direct or constructive impacts.</p> <p>The DEIS then uses the Recreation Element of the General Plan to assert that the City in cooperation with private developers is working to provide trails and therefore these trails are on private land and maintained by the developers and do not adhere to Section 4(f) protection. Again, the trails in South Mountain are <u>not</u> on private land they are on City of Phoenix public land. The National Trail, the Maricopa Trail, the Gila Trail, and the Bursera Trail are all within the park and as such are strictly <u>recreational</u> hiking and biking trails and they are ON public land. Thus they remain Section 4(f) resources to be analyzed for direct or constructive impacts.</p>
459	<p>The last paragraph on p. A586 implies that because the City gets Transportation Enhancement Activity (TEA) Funds to build trails, that the trails in South Mountain are built with TEA funds. This again is an erroneous statement. All the trails in the park fall under the purview of South Mountain and are referenced in the Open Space Element of the 2002 General Plan (P.291). These trails do not receive TEA funds, these trails are built and maintained with City of Phoenix Parks Department funds (some of which come from citizen bonds).</p>
457	<p>As you can see, the disqualification of trail in South Mountain based on the above assessment is inaccurate, far-reaching and just plain wrong. This shows a true lack of knowledge about the SMPP, the trails, Section 4(f) resources and a defensible analysis. Thus they remain Section 4(f) resources to be analyzed for direct or constructive impacts.</p>

Code	Issue	Response
457	Section 4(f) and Section 6(f)	The newest South Mountains trails, the Bursera and the Pyramid, are more than ¼ mile from the proposed freeway and are analyzed in the Final Environmental Impact Statement on page 5-9. The trails are within ¼ mile of the planned Chandler extension and residential development; however, these trails do not have noise-sensitive activities or viewshed characteristics that contribute to their importance as Section 4(f) recreational resources. Discovery of new information not presented in a Draft Environmental Impact Statement as it is published is not failure. Review by agencies and the public of a Draft Environmental Impact Statement equates to a review of a draft report to aid the agencies in making the document more objective and defensible. In this manner, the realization of new information, if such instances of new information are validated by the federal lead agency, permits the Arizona Department of Transportation and its representatives to defensibly embellish on the document’s content.
458	Section 4(f) and Section 6(f)	Trails within Phoenix South Mountain Park/Preserve were not eliminated. City-owned trails within the park were considered collectively as part of the City-owned park. There are no direct or constructive uses of any trails within Phoenix South Mountain Park/Preserve (see discussion beginning on page 5-14 in the Final Environmental Impact Statement).
459	Section 4(f) and Section 6(f)	<p>The comment refers to a statement on page A586 of the Appendix to the Draft Environmental Impact Statement. The statement is made in a section entitled, <i>City of Phoenix Trails System</i>, which refers to the overall trails system of the City. It is also contained in a section discussing overall eligibility of trails to protection under Section 4(f). No reference to the trails within South Mountain Park/Preserve appears in this statement and there is no attempt to exclude South Mountain Park/Preserve Trails from consideration under Section 4(f).</p> <p>The discussion of resources afforded protection under Section 4(f) contains an analysis of the trails of the South Mountain Park/Preserve (see discussion beginning on page 5-14 of the Final Environmental Impact Statement).</p>

Code	Comment Document
460	<p><u>Lack of Identification of Section 4(f) Resources</u></p> <p>The DEIS does not represent the existing conditions in the SMPP relative to the trails. As with many parts of the DEIS, the existing conditions and environmental consequences were authored in 2006-2008 and have not been updated. It is clear from the correspondence in the Appendix that HDR/ADOT has not revisited the study area to document the change in conditions which have occurred.</p>
461	<p>In 2011, the City of Phoenix constructed two new trails in the west end of SMPP. They are accessed by the future 19th Ave trailhead at the end of Chandler Blvd. The trails go west and east on the Main South Ridge. They are called the Bursera Trail and the Pyramid Trail. Additionally another trail exists in the area. It is called the Gila Trail and has been in use and recognized by the City of Phoenix for over 12 years (all identified on Google maps and Google Earth). None of these three trails are mentioned and documented in the DEIS. This is noteworthy as in Chapter 5, p 5-25 the following statement is made: "The cuts would be located in a remote portion of SMPP, not near any trail and barely visible from any of the more readily used trails."</p>
462	<p>Below is a picture taken from the Bursera Trail, high on the ridge, and its view onto the Main Ridge North where the proposed freeway will cut. It is obvious from the picture below that the above statement is no longer true.</p> 
463	<p>As you can see, the DEIS has missed identifying three Section 4(f) resources, it has also incorrectly analyzed the impact to any Section 4(f) resources in the west end of SMPP. While there will not be a</p>

Code	Issue	Response
460	Section 4(f) and Section 6(f)	The newest South Mountains trails, the Bursera and the Pyramid, are more than ¼ mile from the proposed freeway and are analyzed in the Final Environmental Impact Statement on page 5-9. The trails are within ¼ mile of the planned Chandler extension and residential development; however, these trails do not have noise-sensitive activities or viewshed characteristics that contribute to their importance as Section 4(f) recreational resources.
461	Section 4(f) and Section 6(f)	The newest Phoenix South Mountain Park/Preserve trails, the Bursera and Pyramid, have been included in an updated trails map in the Final Environmental Impact Statement. Visual analysis maintains that the cuts would be located in a remote portion of Phoenix South Mountain Park/Preserve, not near any trail and barely visible from any of the more readily used trails. City-owned trails within the park were considered collectively as part of the City-owned park. Discussions with the South Mountain Ranger indicate that the Gila Trail—although well-defined—is not a designated trail within the park. There are no direct or constructive uses of any trails within Phoenix South Mountain Park/Preserve.
462	Visual Resources	Visual analysis establishes that the proposed cuts would be in a remote portion of Phoenix South Mountain Park/Preserve, not near any trail, and would be barely visible from any of the more readily used trails. From the view provided, one can also see the development along 51st Avenue. The South Mountains provide views of urban Phoenix, including its freeways.
463	Section 4(f) and Section 6(f)	There is no constructive use of the trails within Phoenix South Mountain Park/Preserve, including the ones the comment mentions. The trails are within ¼ mile of the planned Chandler extension and residential development; however, these trails do not have noise-sensitive activities or viewshed characteristics that contribute to their importance as Section 4(f) recreational resources. Although cuts could be seen, this would not render the trail unusable for recreational purposes.

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	<p>direct use of these trails, there will clearly be a constructive use of these trails. It is tragic that the solitude, peacefulness and beauty experienced on these trails (old and new) will be so dramatically diminished by the proposed action. This must be include in a constructive use analysis</p>
464	<p>The Section 4(f) Evaluation is incomplete and filled with misstatements, therefore the analysis is deficient. Figure 5-6 needs to be amended to include the trails and developed measures to minimize harm. As a whole, this report needs to be amended and alternatives reevaluated to avoid impact and/or evaluate measures to minimize harm.</p>
465	<p>As an overall final editorial, it seems tragic that the process went out of its way to realign the proposed project to preserve other Section 4(f) resources (Hudson Farm, Barnes Diary Farm, and Hackin Farmstead, all on private property) when it is most certain they are only being preserved to be eventually demolished by future development, yet other Section 4(f) resources such as the trails in SMPP, which will be used by thousands of people for many years to come, are discounted, devalued and dismissed as an important protected resource.</p>
466	<p>Many of the statements in the Section 4(f) Evaluation are clearly pre-decisional and the evaluation was not done by or with a professional who understands the SMPP, its trail system or the City of Phoenix General Plan. This leads to a misleading analysis. The public uses the DEIS as a tool for information, yet the information is not only incomplete by wrong. The Section 4(f) Evaluation needs to be revised.</p>

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464	Section 4(f) and Section 6(f)	Trails maps have been updated, and new trails are analyzed in the Final Environmental Impact Statement because they are within ¼ mile of the Chandler Extension (not the proposed freeway) (see page 5-9). Because none of the action alternatives or options would not incorporate land from the Section 4(f) resource, and would have no proximity impacts so severe that the protected activities, features, or attributes that qualifies the trails for protection under Section 4(f) are substantially impaired, no measures to minimize harm are warranted.
465	Section 4(f) and Section 6(f)	The process upon which Section 4(f) resources were identified and evaluated for feasible and prudent avoidance possibilities followed the rigorous procedural requirements as set forth in Federal Highway Administration Technical Advisory T 6640.8A Guidance for Preparing and Processing Environmental and Section 4(f) Documents and related guidance. The comment suggests trails in the South Mountain Park/Preserve would be subject to direct or constructive use; however, as shown in Chapter 5 of the Final Environmental Impact Statement, such use would be avoided by the proposed freeway.
466	Section 4(f) and Section 6(f)	<p>Trails within Phoenix South Mountain Park/Preserve were not eliminated. City-owned trails within the park were considered collectively as part of the City-owned park. There are no direct or constructive uses of any trails within Phoenix South Mountain Park/Preserve (see discussion beginning on page 5-14 in the Final Environmental Impact Statement).</p> <p>Trails maps have been updated, and new trails are analyzed in the Final Environmental Impact Statement because they are within ¼ mile of the Chandler Extension (not the proposed freeway) (see page 5-9). Because none of the action alternatives or options would not incorporate land from the Section 4(f) resource, and would have no proximity impacts so severe that the protected activities, features, or attributes that qualifies the trails for protection under Section 4(f) are substantially impaired, no measures to minimize harm are warranted.</p> <p>The Section 4(f) evaluation in its entirety represents an exhaustive, comprehensive, objective, and meaningful effort in accordance with requirements of the law. Evaluation of each resource included active engagement of resource owners to clarify resource importance and use (extensive interaction with owner/operators of Section 4(f) resources is well documented in the Appendices of the Final Environmental Impact Statement).</p> <p>The U.S. Department of the Interior [the agency with direct oversight of Section 4(f)] review of the Draft Environmental Impact Statement noted: “Following our review of the Section 4(f) Evaluation, we concur that there is no feasible or prudent alternative to the Preferred Alternative selected in the document, and that all measures have been taken to minimize harm to these resources” The complete letter can be found in Appendix 7, Volume III, on page B4 of the Final Environmental Impact Statement. The Section 4(f) evaluation was thorough and complete.</p>

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467	<p><u>Reevaluate Purpose and Need Statement</u></p> <p>A Purpose and Need statement is meant to address a problem. The South Mountain 202 project is a solution looking for a problem. The 2012 Purpose and Need statement (P&N) in the South Mountain DEIS does not reflect the current problem. On p.1-1, Chapter 1 the following statement is made; “At the beginning of the EIS process, the need for a major transportation facility was reexamined to determine whether such a facility is still needed”. This is a false statement as the projects need was not reevaluated under the existing and current conditions of 2010-2013. The P&N statement was developed over 8 years ago when the problem in the Valley was its cycle of rapid suburban growth and sprawl and automobile dependency and it is the same statement that is being currently used. The need for this major transportation facility has changed if the correct and current conditions/problems are reevaluated impartially without prejudice. The purported need for the South Mountain 202 is NOT based on the current need and current existing conditions/problems in the southwest Phoenix Metropolitan Area.</p> <p>The P&N was not adequately reevaluated to reflect the growth trends and conditions which have developed in the last 5-8 years. The conclusions; that the completion of the South Mountain 202 Loop is necessary to meet an existing need is based on an inaccurate misrepresentation of the facts. This document dictates the solution by manipulating the P&N to portray that population growth, housing projections and transportation uses from 2004-2009 are relevant and applicable to the current transportation demands and needs of the Phoenix Metropolitan area.</p> <p>The P&N in the DEIS is not based on most recent data. It does not reflect accurate growth projections, current social demands and economic development, and a change in transportation demand and patterns. The information used for the DEIS is based on outdated and limited information as the shifts have been dramatic in the last three years and very little primary data has been produced at this time to make accurate predictions and projections about the future growth and demands in the valley. The P&N is based on MAG data from 2005-2009 which is then used to project out to 2035. Any projection which uses data from 2005-2009 (because that is all that is available) to extrapolate growth projections does not capture and adjust accurately for what happened from 2008-till 2012. Census data from 2010 (and American Community Survey data from 2010-2011) has only limited value as a snap shot and cannot be used in comparison to the 2000 Census data. Not having access to relevant data is not a excuse for using or recycling old data and conclusions.</p> <p>The data used does not accurately reflect what has and what will be happening to the valley growth patterns, employment and housing development. (p.1-2, Chapter 1 Purpose and Need). It errs by simply using the <i>historic</i> data to create future projections. It also relies on what cities have “guestimated” to be their future growth in population and housing starts (much of which is not reality based, but wishful thinking). Social scientists and demographers have been studying the valley and the southwest and have many relevant observations and projections. The valley is still in a period of dramatic change in its growth and recovery and the modeling that MAG uses does not reflect the relevant socioeconomic conditions that are evolving even as we speak (foreclosed real estate market driving speculative and rental acquisitions resulting in a change in homeownership patterns, change in state immigration legislation, more transient workforce which are not tied to homeownership, increase</p>

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467	Purpose and Need	<p>At the beginning of the environmental impact statement process, the need for a major transportation facility was reexamined to determine whether such a facility is still needed. Validation of those findings occurred throughout the entire environmental impact statement process. Analysis of the purpose and need for the proposed action followed National Environmental Policy Act and Federal Highway Administration implementing guidance on the subject matter and used state-of-the-practice analytical tools, as pointed out in Table 1-3, “Traffic Analysis Tools,” on page 1-13 of the Draft Environmental Impact Statement. The results of the analysis determined that a transportation problem does exist and that problem will continue in the foreseeable future (see section, <i>Conclusions</i>, on page 1-21). As noted on page 3-1 in the section, <i>Reconfirm the Purpose and Need for the Proposed Action</i>, a continuous validation process was undertaken throughout the environmental impact statement process to ensure past conclusions in the environmental impact statement process remained valid.</p> <p>The analyses in the Draft Environmental Impact Statement used socioeconomic and traffic projections at the regional analysis zone and traffic analysis zone levels. At the time of publication of the Draft Environmental Impact Statement, Census 2010-based socioeconomic data at the regional analysis zone and traffic analysis zone levels had not been adopted by the Maricopa Association of Governments and were not available to the project team. Therefore, the data used in the Draft Environmental Impact Statement were the most appropriate information available.</p> <p>The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future.</p> <p>The Maricopa Association of Governments’ control total for Maricopa County is consistent with the “ADOA—Medium Series.”</p> <p>The National Environmental Policy Act recognizes 1) that data and projections can change throughout the process, 2) that it is important for the process to account for those changes as they become available, and 3) a reasonable person could conclude that the updated information would lead to substantially different results that could affect the decision-making attributes of the National Environmental Policy Act. This guidance permits disciplinary experts to make study recommendations based on recognized expertise without having to “overstudy everything,” thus maintaining the spirit and intent of National Environmental Policy Act directives on timely completion and flexibility in the process. Validation of information has occurred throughout the duration of the environmental impact statement process; the assessment of purpose and need for the proposed action is no different, and analytical validation is part of the Final Environmental Impact Statement.</p>

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	<p><u>Reevaluate Purpose and Need Statement</u></p> <p>A Purpose and Need statement is meant to address a problem. The South Mountain 202 project is a solution looking for a problem. The 2012 Purpose and Need statement (P&N) in the South Mountain DEIS does not reflect the current problem. On p.1-1, Chapter 1 the following statement is made; “At the beginning of the EIS process, the need for a major transportation facility was reexamined to determine whether such a facility is still needed”. This is a false statement as the projects need was not reevaluated under the existing and current conditions of 2010-2013. The P&N statement was developed over 8 years ago when the problem in the Valley was its cycle of rapid suburban growth and sprawl and automobile dependency and it is the same statement that is being currently used. The need for this major transportation facility has changed if the correct and current conditions/problems are reevaluated impartially without prejudice. The purported need for the South Mountain 202 is NOT based on the current need and current existing conditions/problems in the southwest Phoenix Metropolitan Area.</p> <p>The P&N was not adequately reevaluated to reflect the growth trends and conditions which have developed in the last 5-8 years. The conclusions; that the completion of the South Mountain 202 Loop is necessary to meet an existing need is based on an inaccurate misrepresentation of the facts. This document dictates the solution by manipulating the P&N to portray that population growth, housing projections and transportation uses from 2004-2009 are relevant and applicable to the current transportation demands and needs of the Phoenix Metropolitan area.</p> <p>The P&N in the DEIS is not based on most recent data. It does not reflect accurate growth projections, current social demands and economic development, and a change in transportation demand and patterns. The information used for the DEIS is based on outdated and limited information as the shifts have been dramatic in the last three years and very little primary data has been produced at this time to make accurate predictions and projections about the future growth and demands in the valley. The P&N is based on MAG data from 2005-2009 which is then used to project out to 2035. Any projection which uses data from 2005-2009 (because that is all that is available) to extrapolate growth projections does not capture and adjust accurately for what happened from 2008-till 2012. Census data from 2010 (and American Community Survey data from 2010-2011) has only limited value as a snap shot and cannot be used in comparison to the 2000 Census data. Not having access to relevant data is not a excuse for using or recycling old data and conclusions.</p> <p>The data used does not accurately reflect what has and what will be happening to the valley growth patterns, employment and housing development. (p.1-2, Chapter 1 Purpose and Need). It errs by simply using the <i>historic</i> data to create future projections. It also relies on what cities have “guestimated” to be their future growth in population and housing starts (much of which is not reality based, but wishful thinking). Social scientists and demographers have been studying the valley and the southwest and have many relevant observations and projections. The valley is still in a period of dramatic change in its growth and recovery and the modeling that MAG uses does not reflect the relevant socioeconomic conditions that are evolving even as we speak (foreclosed real estate market driving speculative and rental acquisitions resulting in a change in homeownership patterns, change in state immigration legislation, more transient workforce which are not tied to homeownership, increase</p>

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467 (cont.)		The reader is referred to Draft Environmental Impact Statement Chapter 3, <i>Alternatives</i> , and, specifically, the section, <i>Alternatives Development and Screening Process Conclusions</i> , beginning on page 3-26, noting “... a comprehensive set of alternatives including all modes was considered ... assurance that the screening process was an open process ... a logical, sequential, step-by-step process using data and expertise from multiple disciplines ...” to demonstrate all possibilities were considered.
468	Purpose and Need	<p>The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future.</p> <p>The Federal Highway Administration and the U.S. Environmental Protection Agency approved the air quality conformity determination that includes the Maricopa Association of Governments regional travel demand model that produced the traffic projections used in the traffic analysis for the project (see page 3-27 of the Draft Environmental Impact Statement). The model projects demand for multiple modes of travel, including automobile, bus, and light rail. Key model inputs used to forecast travel demand in the Study Area included socioeconomic data (based on land use plans and population and economic forecasts), the anticipated average number of vehicle trips within the region on a daily basis, the distribution of transportation modes used by travelers in the region, the capacity of the transportation infrastructure to accommodate regional travel, and the future transportation infrastructure. The project team used the most recent and reliable data available. The Draft Environmental Impact Statement (Chapter 1, <i>Purpose and Need</i>, and Chapter 3, <i>Alternatives</i>) provides more detail on the data inputs to the modeling effort and discussions of the assumptions used.</p> <p>As noted in the comment, the Maricopa Association of Governments and Arizona Department of Transportation continually study the changes in travel trends and reflect these changes in their travel-generation modeling.</p> <p>Any new information presented in the Final Environmental Impact Statement has been evaluated as to whether it constitutes a substantial change from the information presented in the Draft Environmental Impact Statement. The Federal Highway Administration and Arizona Department of Transportation have examined the data and analysis and have determined that a supplemental environmental impact statement is not warranted.</p>

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	<p>in gasoline prices and an increase in fuel efficiencies are creating new driving patterns, decrease in car ownership and VMT as well as an aging population resulting in less VMT, less vehicle ownership by new drivers and more multimodal usage resulting in less automobile VMT, and change in urban form and cites desire to develop a new urban communities). All of these are resulting in the increasing trend of less emphasis on freeways and moving cars and more emphasis on moving people and creating communities. This new national and regional shift is being discussed and acknowledged at all levels (including inside MAG and ADOT itself) yet this did not transfer to the P&N not the DEIS. Instead there is a recycle of the initial statement which is driven by old data and old projections and models. While traffic projections out to 2035 seem easy to conduct for transportation specialists, they are rarely based on anything but a historical perspective, and that has changed dramatically as the valley's growth has leveled off and the southwest as a whole is seeing a change in demographics. This DEIS P&N is the same statement which was introduced to the public in 2004-2005. It is no longer accurate, relevant, or timely and was not revisited thoroughly after the 2008 recession to reflect the different political and socioeconomic climate of the valley. The P&N continues to promote the same conclusions (need) "Build it so we can build more," and "We need freeways for economic development." This no longer reflects the conditions of a valley which began to constrict 4 years ago and is experiencing a change in its development and transportation needs.</p>
469	<p>Because the DEIS P&N is based on outdated and misrepresentational data, the analysis and the recommendations are inaccurate and misleading and reach improper conclusions.</p>
470	<p>While there are multiple problems to be fixed in the Valley metropolitan area: am and pm traffic congestion, reduction of pollution to meet federal air quality standards, need for efficient transportation systems, building a \$2.1 billion freeway is NOT the solution to these problems. The solution is through regional planning, focused transportation solutions which respond to community needs, and alleviate of traffic congestion by reducing the induced traffic syndrome.</p>
471	<p>As a final commentary on the P&N: the RTP is a plan which should not be used to codify any ONE transportation project (p.1-2, Chapter 1 Purpose and Need). Residents approved the <i>plan</i> NOT one specific <i>project</i>. Plans can and should change to reflect the every changing needs of a community. Projects created over 25 years ago, are rarely if ever relevant and salient 30 years later. ADOT cannot justify building the South Mountain 202 by claiming it is in the plan, while they systematically transfer money away from other freeways that are in the plan (and thus NOT building projects that are in the RTP) as a means to build the 202.</p>
472	<p>The DEIS P&N needs to be meaningfully reevaluated as it claims in the opening pages in Chapter 1. This project needs to be reevaluated if there is a need for this project given the pertinent and relevant issues which the southwest valley is facing in this changing transportation environment.</p>

Code	Issue	Response
469	Purpose and Need	<p>The Federal Highway Administration and the U.S. Environmental Protection Agency approved the air quality conformity determination that includes the Maricopa Association of Governments regional travel demand model that produced the traffic projections used in the traffic analysis for the project (see page 3-27 of the Draft Environmental Impact Statement). The model projects demand for multiple modes of travel, including automobile, bus, and light rail. Key model inputs used to forecast travel demand in the Study Area included socioeconomic data (based on land use plans and population and economic forecasts), the anticipated average number of vehicle trips within the region on a daily basis, the distribution of transportation modes used by travelers in the region, the capacity of the transportation infrastructure to accommodate regional travel, and the future transportation infrastructure.</p> <p>The analyses in the Draft Environmental Impact Statement used socioeconomic and traffic projections at the regional analysis zone and traffic analysis zone levels. At the time of publication of the Draft Environmental Impact Statement, Census 2010-based socioeconomic data at the regional analysis zone and traffic analysis zone levels had not been adopted by the Maricopa Association of Governments and were not available to the project team. Therefore, the data used in the Draft Environmental Impact Statement were the most appropriate information available.</p> <p>The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future.</p>
470	Purpose and Need	<p>The proposed freeway is part of the <i>Regional Transportation Plan</i> for the Maricopa Association of Governments region. The <i>Regional Transportation Plan</i>, as described on pages 1-5 and 1-10 of the Final Environmental Impact Statement, addresses freeways, streets, transit, airports, bicycle and pedestrian facilities, freight, demand management, system management, and safety. The proposed freeway is only one part of the overall multimodal transportation system planned to meet the travel demand needs of the Maricopa Association of Governments region.</p>
471	Purpose and Need	<p>As stated in the subject heading referenced in the comment, the text referenced places the <i>Context of the Proposed Action in Current Regional Transportation Planning</i>; no text directly or indirectly codifies one transportation project in the <i>Regional Transportation Plan</i> as presented in the Final Environmental Impact Statement.</p>
472	Purpose and Need	<p>The analyses in the Draft Environmental Impact Statement used socioeconomic and traffic projections at the regional analysis zone and traffic analysis zone levels. At the time of publication of the Draft Environmental Impact Statement, Census 2010-based socioeconomic data at the regional analysis zone and traffic analysis zone levels had not been adopted by the Maricopa Association of Governments and were not available to the project team. Therefore, the data used in the Draft Environmental Impact Statement were the most appropriate information available.</p>

(Response 472 continues on next page)

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472 (cont.)		<p>The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future.</p> <p>The National Environmental Policy Act recognizes 1) that data and projections can change throughout the process, 2) that it is important for the process to account for those changes as they become available, and 3) a reasonable person could conclude that the updated information would lead to substantially different results that could affect the decision-making attributes of the National Environmental Policy Act. This guidance permits disciplinary experts to make study recommendations based on recognized expertise without having to “overstudy everything,” thus maintaining the spirit and intent of National Environmental Policy Act directives on timely completion and flexibility in the process. Validation of information has occurred throughout the duration of the environmental impact statement process; the assessment of purpose and need for the proposed action is no different, and analytical validation is part of the Final Environmental Impact Statement.</p>

Code	Comment Document
	<div><p><u>Additional Comments</u></p><p>Five</p><p>Lakewood Community Association's Concerns & Response to DEIS for Loop 202 (South Mountain Freeway) dated July 20, 2013.</p></div>

Code	Issue	Response

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	<p>LAKESIDE COMMUNITY ASSOCIATION'S CONCERNS & RESPONSE TO DEIS FOR LOOP 202 (SOUTH MOUNTAIN FREEWAY)</p> <p>Prepared for</p> <p>Protect Arizona's Resources and Children (PARC), et al. Phoenix, Arizona</p> <p>by</p> <p>Lakeside Community Association Board of Directors July 20, 2013</p>

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473	<p><u>Lakewood HOA’s South Mountain Freeway Concerns:</u></p> <p>1. <u>Loss of Water from Community Water Wells:</u></p> <p>The lakes are a centerpiece of the Lakewood community, losing the existing groundwater well supply will have a significant negative impact on the entire community, which consists of approximately 2,800 units. With respect to the Foothills Community Association, the DEIS makes the statement that “It is assumed that a new well location could be found that would produce water comparable in quality and quantity to the acquired well, and that no change in the existing groundwater right would result.” The Lakewood Community Association has an even greater dependence on water than the Foothills, and the DEIS statement ignores the significant difficulty that was originally encountered in finding a source of water when Lakewood was incorporated. It is unclear whether or not the loss of the existing well even could be replaced, regardless of costs. With the state of Arizona currently restricting or disallowing man-made lakes in new property development, it is also unclear whether or not municipal water could be used as a source. As a result of the loss of the lakes, the property values in Lakewood would be negatively impacted with grave consequences to the entire community.</p> <p>In addition to financial impacts, there are environmental as well, migratory birds would no longer have Lakewood as a possible stopping point along their migration route, and the destruction of the natural riparian area south of Pecos will be a detriment to the wildlife in the area.</p> <p>2. <u>Home Valuation</u></p> <p>A. Reduction in property values based health/environmental impacts such as air and noise pollution.</p> <p>B. Substantial reduction in property values if access to water is hindered which could endanger the existence of the Lakes. The whole community is based on the existence and proximity to the Lakes. Current property values are based on a lake community and lifestyle.</p> <p>C. Substantial reduction in property values for lake-front homes if Lakes are compromised by water access.</p> <p>D. Ability to resell a Lakewood home would be deleteriously impacted due to air and noise pollution.</p> <p>E. Freeway would disrupt a quiet and clean Lakewood environment which would drive property values lower.</p> <p>F. Lost revenue to HOA from Lakewood home displacements would decrease community facilities and amenities causing downward pressure on property values.</p> <p>G. Freeway would have negative lifestyle impacts which would reduce the value of living in Lakewood and thus cause home values to fall. Lifestyle impacts include reduced access to safe recreation like cycling and roller-blading around community roads due to increased and altered traffic. Freeway noise would also impact outdoor leisure and activities such as community picnics, swimming and outdoor dining.</p> <p>H. Freeway could disrupt the reliable performance of the primary aquifer which supplies Lakewood with its water and thus Lakes. These disruptions could include deviations to surface and ground water flows which feed the aquifer. As this reliable source of water is endangered, the reliability of the Lakes and irrigation of community vegetation would be endangered. This would lead to negative impacts to lake recreation and appearance of the community. Ultimately, the existence of the Lakes themselves could be threatened. This would make Lakewood a much less attractive place to live and substantially decrease home and property valuation.</p>

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473	Water Resources	<p>Because of the public concern expressed during the environmental impact statement process, page 4-100 of the Draft Environmental Impact Statement, focuses on the Foothills Community Association to provide more details on the well acquisition, condition assessment, and replacement process used by the Arizona Department of Transportation. The Arizona Department of Transportation understands, and states on page 4-100 of the Draft Environmental Impact Statement, respectively, that finding a suitable location for a new well in this area may be difficult.</p> <p>Depending on whether an action alternative were to become the Selected Alternative, it may be possible to keep certain wells in their current location, but move the well controls and associated piping to outside of the right-of-way. Such an analysis would be performed later in the design process.</p>
474	Water Resources	<p>The project would not adversely affect any of the artificial lakes and ponds along Pecos Road and, therefore, would not affect migratory birds using those water features. There are no natural riparian areas or riparian vegetation adjacent to Pecos Road; the vegetation growing along the drainage ditch on the southern side of Pecos Road would not be removed.</p>
475	Neighborhoods/ Communities	<p>The reader is referred to the section, <i>Social Conditions</i>, beginning on Final Environmental Impact Statement page 4-20, to learn about criteria applied when considering impacts on social conditions and what mitigation is under consideration. Mitigation measures proposed can be found throughout Chapter 4. These have direct application to the reduction of impacts that could affect certain definitions of quality of life.</p> <p>As to property values and the effects of proximity of freeway, numerous studies have been done on the subject and in general, results have varied but with an underlying consensus that many variables contribute to property values.</p> <p>A review of the literature reveals few detailed and comprehensive analyses of the relationship between the transportation infrastructure and residential property values (Transportation Research Record: Journal of the Transportation Research Board, No. 2174, Transportation Research Board of the National Academies, Washington, D.C., 2010, pages 138–47; “Impact of Highways on Property Values: Case Study of the Superstition Freeway Corridor”). A recent study by the California Department of Transportation concluded that freeway facilities did not substantially affect sales prices in residential areas adjacent to the facility. The study concluded that it is the visibility of the freeway that may influence selling price and not distance or noise. As a result, the researchers generally concluded that the more the visibility of a new freeway is reduced, the less it would determine the sales price of homes sold in the area.</p>
476	Water Resources	<p>The procedure identified on page 4-100 of the Draft Environmental Impact Statement, defines the procedure that the Arizona Department of Transportation would use to replace adversely affected wells, and also identifies the general costs the Arizona Department of Transportation would incur to replace the lost water sources. As noted in this discussion, if it were necessary to provide replacement water instead of a new well, the Arizona Department of Transportation would, in negotiations with the well owner, include the difference between the costs of pumping the well and the costs of the new replacement water source. Which of these outcomes would take place would become known during the final design of the Selected Alternative, should an action alternative be selected.</p>

Code	Comment Document
	<p><u>Lakewood HOA’s South Mountain Freeway Concerns:</u></p> <p>1. <u>Loss of Water from Community Water Wells:</u></p> <p>The lakes are a centerpiece of the Lakewood community, losing the existing groundwater well supply will have a significant negative impact on the entire community, which consists of approximately 2,800 units. With respect to the Foothills Community Association, the DEIS makes the statement that “It is assumed that a new well location could be found that would produce water comparable in quality and quantity to the acquired well, and that no change in the existing groundwater right would result.” The Lakewood Community Association has an even greater dependence on water than the Foothills, and the DEIS statement ignores the significant difficulty that was originally encountered in finding a source of water when Lakewood was incorporated. It is unclear whether or not the loss of the existing well even could be replaced, regardless of costs. With the state of Arizona currently restricting or disallowing man-made lakes in new property development, it is also unclear whether or not municipal water could be used as a source. As a result of the loss of the lakes, the property values in Lakewood would be negatively impacted with grave consequences to the entire community.</p> <p>In addition to financial impacts, there are environmental as well, migratory birds would no longer have Lakewood as a possible stopping point along their migration route, and the destruction of the natural riparian area south of Pecos will be a detriment to the wildlife in the area.</p> <p>2. <u>Home Valuation</u></p> <p>A. Reduction in property values based health/environmental impacts such as air and noise pollution.</p> <p>B. Substantial reduction in property values if access to water is hindered which could endanger the existence of the Lakes. The whole community is based on the existence and proximity to the Lakes. Current property values are based on a lake community and lifestyle.</p> <p>C. Substantial reduction in property values for lake-front homes if Lakes are compromised by water access.</p> <p>D. Ability to resell a Lakewood home would be deleteriously impacted due to air and noise pollution.</p> <p>E. Freeway would disrupt a quiet and clean Lakewood environment which would drive property values lower.</p> <p>F. Lost revenue to HOA from Lakewood home displacements would decrease community facilities and amenities causing downward pressure on property values.</p> <p>G. Freeway would have negative lifestyle impacts which would reduce the value of living in Lakewood and thus cause home values to fall. Lifestyle impacts include reduced access to safe recreation like cycling and roller-blading around community roads due to increased and altered traffic. Freeway noise would also impact outdoor leisure and activities such as community picnics, swimming and outdoor dining.</p> <p>H. Freeway could disrupt the reliable performance of the primary aquifer which supplies Lakewood with its water and thus Lakes. These disruptions could include deviations to surface and ground water flows which feed the aquifer. As this reliable source of water is endangered, the reliability of the Lakes and irrigation of community vegetation would be endangered. This would lead to negative impacts to lake recreation and appearance of the community. Ultimately, the existence of the Lakes themselves could be threatened. This would make Lakewood a much less attractive place to live and substantially decrease home and property valuation.</p>

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Code	Issue	Response
476 (cont.)		Depending on whether an action alternative were to become the Selected Alternative, it may be possible to keep certain wells in their current location, but move the well controls and associated piping to outside of the right-of-way. Such an analysis would be performed later in the design process.
477	Noise, Air Quality	<p>The reader is referred to the text box, “<i>Freeway Awareness</i>,” beginning on Draft Environmental Impact Statement page 4-12, and the text box, “<i>If My Property Would Be Affected, Can ADOT Purchase the Land in Advance?</i>”, on page 4-43. Property acquisition is governed in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. This process outlines determination of property values through the acquisition process.</p> <p>Environmental analyses and noise analyses conducted for and documented in the Draft Environmental Impact Statement comply with the Federal Highway Administration’s regulations for implementing National Environmental Policy Act at 23 Code of Federal Regulations 771 and for conducting noise analyses at 23 Code of Federal Regulations 772. These issues are addressed in the Draft Environmental Impact Statement. Sensitive receivers for noise and air are already included in the air quality and noise analyses in accordance with State and federal guidance. The air quality assessment for the proposed freeway analyzed impacts from carbon monoxide and particulate matter (PM₁₀) and followed U.S. Environmental Protection Agency guidelines. For mobile source air toxics, the analysis showed that for the Study Area, constructing the freeway would have a marginal effect on annual emissions in 2025 and 2035 (less than a 1 percent difference in total annual emissions between the Preferred Alternative and No-Action Alternative). With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions. The air quality analyses were updated for the Final Environmental Impact Statement, including a quantitative particulate matter (PM₁₀) analysis, and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement.</p> <p>According to the air quality analyses conducted for the proposed freeway, no violations of either the carbon monoxide or particulate matter (PM₁₀) standards were identified, even at worst-case locations along the project corridor. Thus, the carbon monoxide and particulate analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones; therefore, no mitigation of these effects is required.</p> <p>The noise analysis was also updated for the Final Environmental Impact Statement using most recent Federal Highway Administration and Arizona Department of Transportation policy and traffic projections provided by the Maricopa Association of Governments in August 2013. This updated analysis begins on page 4-88 of the Final Environmental Impact Statement. No substantial differences between the analyses presented in the Draft and the Final Environmental Impact Statements resulted.</p>

Code	Comment Document
	<p><u>Lakewood HOA’s South Mountain Freeway Concerns:</u></p> <p>1. <u>Loss of Water from Community Water Wells:</u></p> <p>The lakes are a centerpiece of the Lakewood community, losing the existing groundwater well supply will have a significant negative impact on the entire community, which consists of approximately 2,800 units. With respect to the Foothills Community Association, the DEIS makes the statement that “It is assumed that a new well location could be found that would produce water comparable in quality and quantity to the acquired well, and that no change in the existing groundwater right would result.” The Lakewood Community Association has an even greater dependence on water than the Foothills, and the DEIS statement ignores the significant difficulty that was originally encountered in finding a source of water when Lakewood was incorporated. It is unclear whether or not the loss of the existing well even could be replaced, regardless of costs. With the state of Arizona currently restricting or disallowing man-made lakes in new property development, it is also unclear whether or not municipal water could be used as a source. As a result of the loss of the lakes, the property values in Lakewood would be negatively impacted with grave consequences to the entire community.</p> <p>In addition to financial impacts, there are environmental as well, migratory birds would no longer have Lakewood as a possible stopping point along their migration route, and the destruction of the natural riparian area south of Pecos will be a detriment to the wildlife in the area.</p> <p>2. <u>Home Valuation</u></p> <p>A. Reduction in property values based health/environmental impacts such as air and noise pollution.</p> <p>B. Substantial reduction in property values if access to water is hindered which could endanger the existence of the Lakes. The whole community is based on the existence and proximity to the Lakes. Current property values are based on a lake community and lifestyle.</p> <p>C. Substantial reduction in property values for lake-front homes if Lakes are compromised by water access.</p> <p>D. Ability to resell a Lakewood home would be deleteriously impacted due to air and noise pollution.</p> <p>E. Freeway would disrupt a quiet and clean Lakewood environment which would drive property values lower.</p> <p>F. Lost revenue to HOA from Lakewood home displacements would decrease community facilities and amenities causing downward pressure on property values.</p> <p>G. Freeway would have negative lifestyle impacts which would reduce the value of living in Lakewood and thus cause home values to fall. Lifestyle impacts include reduced access to safe recreation like cycling and roller-blading around community roads due to increased and altered traffic. Freeway noise would also impact outdoor leisure and activities such as community picnics, swimming and outdoor dining.</p> <p>H. Freeway could disrupt the reliable performance of the primary aquifer which supplies Lakewood with its water and thus Lakes. These disruptions could include deviations to surface and ground water flows which feed the aquifer. As this reliable source of water is endangered, the reliability of the Lakes and irrigation of community vegetation would be endangered. This would lead to negative impacts to lake recreation and appearance of the community. Ultimately, the existence of the Lakes themselves could be threatened. This would make Lakewood a much less attractive place to live and substantially decrease home and property valuation.</p>

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Code	Issue	Response
477 (cont.)		A review of the literature reveals few detailed and comprehensive analyses of the relationship between the transportation infrastructure and residential property values (Transportation Research Record: Journal of the Transportation Research Board, No. 2174, Transportation Research Board of the National Academies, Washington, D.C., 2010, pages 138–47; “Impact of Highways on Property Values: Case Study of the Superstition Freeway Corridor”). A recent study by the California Department of Transportation concluded that freeway facilities did not substantially affect sales prices in residential areas adjacent to the facility. The study concluded that it is the visibility of the freeway that may influence selling price and not distance or noise. As a result, the researchers generally concluded that the more the visibility of a new freeway is reduced, the less it would determine the sales price of homes sold in the area.
478	Acquisitions and Relocations	<p>Land acquisition and relocation assistance services for the project shall be available to all individuals without discrimination in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (Uniform Act). The Uniform Act provides uniform, fair, and equitable treatment of people whose property is impacted or who are displaced as a result of the project, including those with special needs. Advisory assistance services and compensation practices are described in detail in the Arizona Department of Transportation’s <i>Right-of-way Procedures Manual</i>, located at <azdot.gov/business/RightofWay_Properties/booklets-and-manuals>. For further discussion, see page 4-51 of the Final Environmental Impact Statement and Appendix 4-1. For questions on specific properties, contact the Arizona Department of Transportation Right-of-Way Group at (602) 712-7316.</p> <p>There would be no home displacements in the Lakewood community. For other communities, the compensation to the homeowners’ association is dependent on how the subdivision and/or homeowners’ association is legally structured.</p>
479	Acquisitions and Relocations	<p>The reader is referred to the section, <i>Social Conditions</i>, beginning on Draft Environmental Impact Statement page 4-20, to learn about criteria applied when considering impacts on social conditions and what mitigation is under consideration. Mitigation measures proposed can be found throughout Chapter 4. These have direct application to the reduction of impacts that could affect certain definitions of quality of life.</p> <p>As to property values and the effects of proximity of freeway, numerous studies have been done on the subject and, in general, results have varied but with an underlying consensus that many variables contribute to property values.</p> <p>A review of the literature reveals few detailed and comprehensive analyses of the relationship between the transportation infrastructure and residential property values (Transportation Research Record: Journal of the Transportation Research Board, No. 2174, Transportation Research Board of the National Academies, Washington, D.C., 2010, pages 138–47; “Impact of Highways on Property Values: Case Study of the Superstition Freeway Corridor”). A recent study by the California Department of Transportation concluded that freeway facilities did not substantially affect sales prices in residential areas adjacent to the facility. The study concluded that it is the visibility of the freeway that may influence selling price and not distance or noise. As a result, the researchers generally concluded that the more the visibility of a new freeway is reduced, the less it would determine the sales price of homes sold in the area.</p>

(Response 480 begins on next page)

Code	Comment Document
478	<p>3. <u>Home Displacement</u></p> <p>A. Freeway right-of-way could encroach on existing Lakewood homes requiring destruction of several family homes.</p> <p>B. Local community neighborhoods within Lakewood would see a serious negative impact or cease to exist due to destruction of homes and relocation of neighbors.</p> <p>C. Loss of community integrity and relationships, especially for small children separated from friends who would be forced to move away due to home displacement.</p> <p>4. <u>Lost Revenue to HOA</u></p> <p>A. Direct assessment revenue losses of \$350/home per year for each home displaced.</p> <p>B. Further loss of assessments if vacancy rate increases due to image of Lakewood being a less attractive place to live due to deleterious lifestyle impacts of the freeway.</p> <p>C. Viscous cycle of revenue loss leading to reduction of community services leading to further revenue loss (as vacancy rates increase).</p> <p>5. <u>Air Quality</u></p> <p>A. The air quality cause by increase traffic and trucks will decrease the air quality in our community and pose a serious health risk to the residents of the community.</p> <p>6. <u>Traffic Flow and Increase Congestion</u></p> <p>A. Without access to the freeway at 32nd Street, there will be an increase in traffic flow and congestion between 24th Street and 40th Street within the Lakewood Community boundary.</p> <p>7. <u>Increase in Noise from Freeway Traffic</u></p> <p>B. The noise level will dramatically increase due to the proximity of the freeway and the increase in traffic and trucks in and around our community.</p> <p>8. <u>Loss of Access to Property South of Pecos</u></p> <p>A. The HOA owns land south of Pecos which the freeway will cut off any kind of access to.</p> <p>9. <u>Water Retention Issues/Concerns</u></p> <p>A. The freeway will be changing the water run off patterns and cause water retention concerns.</p> <p>10. <u>Loss of Bike Paths on Pecos:</u></p> <p>A. Our community members will no longer have access to the uniquely long, flat bike lane located on Pecos.</p> <p>11. <u>Additional Stress on Deteriorating Surface Streets in Community</u></p> <p>A. The increase in traffic on the community's surface streets will only add additional stress on our already deteriorating city streets in the community.</p>

Code	Issue	Response
480	Water Resources	<p>The procedure identified on page 4-100 of the Draft Environmental Impact Statement, defines the procedure that the Arizona Department of Transportation would use to replace adversely affected wells, and also identifies the general costs the Arizona Department of Transportation would incur to replace the lost water sources. As noted in this discussion, if it were necessary to provide replacement water instead of a new well, the Arizona Department of Transportation would, in negotiations with the well owner, include the difference between the costs of pumping the well and the costs of the new replacement water source.</p> <p>Which of these outcomes would take place would become known during the final design of the Selected Alternative, should an action alternative be selected.</p> <p>Depending on whether an action alternative were to become the Selected Alternative, it may be possible to keep certain wells in their current location, but move the well controls and associated piping to outside of the right-of-way. Such an analysis would be performed later in the design process.</p>
481	Acquisition and Relocation	<p>The reader is referred to the section, <i>Social Conditions</i>, beginning on page 4-20 of the Draft Environmental Impact Statement, to learn about criteria applied when considering impacts on social conditions and what mitigation is under consideration. Mitigation measures proposed can be found throughout Chapter 4. These have direct application to the reduction of impacts that could affect certain definitions of quality of life.</p> <p>As to property values and the effects of proximity of freeway, numerous studies have been done on the subject and, in general, results have varied but with an underlying consensus that many variables contribute to property values.</p> <p>A review of the literature reveals few detailed and comprehensive analyses of the relationship between the transportation infrastructure and residential property values (Transportation Research Record: Journal of the Transportation Research Board, No. 2174, Transportation Research Board of the National Academies, Washington, D.C., 2010, pages 138–47; “Impact of Highways on Property Values: Case Study of the Superstition Freeway Corridor”). A recent study by the California Department of Transportation concluded that freeway facilities did not substantially affect sales prices in residential areas adjacent to the facility. The study concluded that it is the visibility of the freeway that may influence selling price and not distance or noise. As a result, the researchers generally concluded that the more the visibility of a new freeway is reduced, the less it would determine the sales price of homes sold in the area.</p>

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482	<p>3. <u>Home Displacement</u></p> <p>A. Freeway right-of-way could encroach on existing Lakewood homes requiring destruction of several family homes.</p> <p>B. Local community neighborhoods within Lakewood would see a serious negative impact or cease to exist due to destruction of homes and relocation of neighbors.</p> <p>C. Loss of community integrity and relationships, especially for small children separated from friends who would be forced to move away due to home displacement.</p>
	<p>4. <u>Lost Revenue to HOA</u></p> <p>A. Direct assessment revenue losses of \$350/home per year for each home displaced.</p> <p>B. Further loss of assessments if vacancy rate increases due to image of Lakewood being a less attractive place to live due to deleterious lifestyle impacts of the freeway.</p> <p>C. Viscous cycle of revenue loss leading to reduction of community services leading to further revenue loss (as vacancy rates increase).</p>
	<p>5. <u>Air Quality</u></p> <p>A. The air quality cause by increase traffic and trucks will decrease the air quality in our community and pose a serious health risk to the residents of the community.</p>
	<p>6. <u>Traffic Flow and Increase Congestion</u></p> <p>A. Without access to the freeway at 32nd Street, there will be an increase in traffic flow and congestion between 24th Street and 40th Street within the Lakewood Community boundary.</p>
	<p>7. <u>Increase in Noise from Freeway Traffic</u></p> <p>B. The noise level will dramatically increase due to the proximity of the freeway and the increase in traffic and trucks in and around our community.</p>
	<p>8. <u>Loss of Access to Property South of Pecos</u></p> <p>A. The HOA owns land south of Pecos which the freeway will cut off any kind of access to.</p>
	<p>9. <u>Water Retention Issues/Concerns</u></p> <p>A. The freeway will be changing the water run off patterns and cause water retention concerns.</p>
	<p>10. <u>Loss of Bike Paths on Pecos:</u></p> <p>A. Our community members will no longer have access to the uniquely long, flat bike lane located on Pecos.</p>
	<p>11. <u>Additional Stress on Deteriorating Surface Streets in Community</u></p> <p>A. The increase in traffic on the community’s surface streets will only add additional stress on our already deteriorating city streets in the community.</p>

Code	Issue	Response
482	Air Quality	<p>Air Quality analyses conducted for and documented in the Draft and Final Environmental Impact Statements complies with the Federal Highway Administration’s regulations for implementing the National Environmental Policy Act at 23 Code of Federal Regulations 771. These issues are addressed in the Draft and Final Environmental Impact Statements. Sensitive receivers for air are already included in the air quality analyses in accordance with State and federal guidance. The air quality assessment for the proposed freeway analyzed impacts from carbon monoxide and particulate matter (PM₁₀) and followed U.S. Environmental Protection Agency guidelines. The air quality analyses were updated for the Final Environmental Impact Statement, including a quantitative particulate matter (PM₁₀) analysis, and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement.</p> <p>According to the air quality analyses conducted for the proposed freeway, no violations of either the carbon monoxide or particulate matter (PM₁₀) standards were identified, even at worst-case locations along the project corridor. Thus, the carbon monoxide and particulate analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones.</p> <p>40 Code of Federal Regulations Section 1500.1(b) also directs the Federal Highway Administration to focus its National Environmental Policy Act analysis and documentation on issues that are truly significant to the action in question. In the context of mobile source air toxics, the Federal Highway Administration must consider whether changes in mobile source air toxics emissions attributable to a project have the potential for significant health risk. Using cancer risk as an example, the U.S. Environmental Protection Agency estimates that the overall risk of cancer in the United States is approximately 330,000 in a million, and that air toxics (from all sources) are responsible for a risk of approximately 50 in a million. In its most recent mobile source air toxics rule-making, the U.S. Environmental Protection Agency estimated mobile source air toxics cancer risk, after implementation of emissions controls, at approximately 5 in a million (or 0.0015 percent of overall cancer risk from any cause). For the South Mountain Freeway project, the mobile source air toxics emissions analysis for the Study Area found little difference in total annual emissions of mobile source air toxics emissions between the Preferred and No-Action Alternatives (less than a 1 percent difference) in 2025 and 2035. With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions (see discussion beginning on page 4-77 of the Final Environmental Impact Statement). Like most highway projects that have received a mobile source air toxics emissions analysis, the South Mountain Freeway project would result in a negligible change to a very small component of overall cancer risk, and this risk is declining regardless of alternative.</p>

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	<p>3. <u>Home Displacement</u></p> <p>A. Freeway right-of-way could encroach on existing Lakewood homes requiring destruction of several family homes.</p> <p>B. Local community neighborhoods within Lakewood would see a serious negative impact or cease to exist due to destruction of homes and relocation of neighbors.</p> <p>C. Loss of community integrity and relationships, especially for small children separated from friends who would be forced to move away due to home displacement.</p> <p>4. <u>Lost Revenue to HOA</u></p> <p>A. Direct assessment revenue losses of \$350/home per year for each home displaced.</p> <p>B. Further loss of assessments if vacancy rate increases due to image of Lakewood being a less attractive place to live due to deleterious lifestyle impacts of the freeway.</p> <p>C. Viscous cycle of revenue loss leading to reduction of community services leading to further revenue loss (as vacancy rates increase).</p> <p>5. <u>Air Quality</u></p> <p>A. The air quality cause by increase traffic and trucks will decrease the air quality in our community and pose a serious health risk to the residents of the community.</p> <p>483 6. <u>Traffic Flow and Increase Congestion</u></p> <p>A. Without access to the freeway at 32nd Street, there will be an increase in traffic flow and congestion between 24th Street and 40th Street within the Lakewood Community boundary.</p> <p>484 7. <u>Increase in Noise from Freeway Traffic</u></p> <p>B. The noise level will dramatically increase due to the proximity of the freeway and the increase in traffic and trucks in and around our community.</p> <p>485 8. <u>Loss of Access to Property South of Pecos</u></p> <p>A. The HOA owns land south of Pecos which the freeway will cut off any kind of access to.</p> <p>486 9. <u>Water Retention Issues/Concerns</u></p> <p>A. The freeway will be changing the water run off patterns and cause water retention concerns.</p> <p>487 10. <u>Loss of Bike Paths on Pecos:</u></p> <p>A. Our community members will no longer have access to the uniquely long, flat bike lane located on Pecos.</p> <p>488 11. <u>Additional Stress on Deteriorating Surface Streets in Community</u></p> <p>A. The increase in traffic on the community's surface streets will only add additional stress on our already deteriorating city streets in the community.</p>

Code	Issue	Response
483	Traffic	<p>The determination to not include an interchange at 32nd Street was made in coordination with the City of Phoenix (see Figure 3-8 on page 3-15 of the Final Environmental Impact Statement). The interchange would have displaced over 100 homes and would have been located near an existing high school.</p> <p>In 2006, the City of Phoenix conducted a traffic circulation study to evaluate the impacts of the proposed freeway on the local street system, including the shift of access to Foothills Reserve and Calabrea from Pecos Road to Chandler Boulevard. The City study found no adverse effects on the local street system from the freeway (see Appendix 3-1 in the Final Environmental Impact Statement).</p>
484	Noise	<p>Noise analyses conducted for and documented in the Draft and Final Environmental Impact Statements comply with the Federal Highway Administration's regulations for implementing the National Environmental Policy Act at 23 Code of Federal Regulations 771 and for conducting noise analyses at 23 Code of Federal Regulations 772. These issues are addressed in the Draft and Final Environmental Impact Statement. Sensitive receivers for noise are already included in the noise analysis in accordance with State and federal guidance. As stated on page 4-82 of the Draft Environmental Impact Statement, over 220 sensitive receivers were evaluated from a traffic noise perspective. All of the receivers represent noise sensitive land uses in proximity to the proposed project; therefore, these receivers would have higher noise levels than the schools more distant from the proposed action. The noise analysis was also updated for the Final Environmental Impact Statement using most recent Federal Highway Administration and Arizona Department of Transportation policy and traffic projections provided by the Maricopa Association of Governments in August 2013. This updated analysis begins on page 4-88 of the Final Environmental Impact Statement. No substantial differences between the analyses presented in the Draft and the Final Environmental Impact Statements resulted.</p>
485	Acquisitions and Relocations	<p>Access to the land south of the proposed freeway would be maintained in a similar way as the access existing today. If reasonable access could not be maintained, the property might be subject to acquisition by the Arizona Department of Transportation in accordance with State law.</p>
486	Design	<p>Pecos Road drainage is designed as a pass-through system. In other words, water is allowed to drain along its natural existing pathway underneath the freeway and to Gila River Indian Community land.</p> <p>If an action alternative were to become the Selected Alternative, the E1 Alternative would be constructed aboveground and the existing culverts would extend to pass drainage under the freeway. Pecos Road currently has numerous existing culvert crossings. Extending the existing culverts or upsizing the culverts would maintain or improve drainage flows. This would ensure that there would be no adverse flooding impacts to adjacent properties. (See pages 3-18, 4-98, and 4-107 of the Draft Environmental Impact Statement.)</p>
487	Design	<p>The main line of the E1 Alternative would not have a bicycle route as part of the design. Continuous east-west riding would be possible in the neighborhoods adjoining the alternative and along Chandler Boulevard.</p>
488	Traffic	<p>In 2006, the City of Phoenix conducted a traffic circulation study to evaluate the impacts of the proposed freeway on the local street system. The City study found no adverse effects on the local street system from the freeway (see Appendix 3-1 in the Final Environmental Impact Statement).</p>

Code	Comment Document
	<div><p><u>Additional Comments</u></p><p>Six</p><p>Comments of Nicoli V. Kuminoff on the DEIS for South Mountain Freeway, dated July 21, 2013</p></div>

Code	Issue	Response

Code	Comment Document
489	<p>July 21, 2013</p> <p>South Mountain Study Team Arizona Department of Transportation 1655 West Jackson Street, MD 126F Phoenix, Arizona 85007</p> <p>RE: Comments on Draft EIS for South Mountain Freeway (FHWA-AZ-EIS-13-01-D)</p> <p>Dear South Mountain Study Team,</p> <p>I am writing to comment on the draft environmental impact statement (DEIS) you released for the Loop 2002 South Mountain Freeway study. As a professional economist, a parent of young children, and a resident of Phoenix, I am deeply concerned about your DEIS. Overall, I think the DEIS reflects an unwarranted bias toward building the freeway with the Pecos Road alignment. After careful review, I cannot help but think that the DEIS systematically overstates the benefits of building the freeway and systematically understates the negative externalities on safety and environmental quality. Furthermore, the DEIS should be forthright about the fact that the precise magnitudes of both the benefits and costs are uncertain. Yet the DEIS has an asymmetric treatment of uncertainty. Economic costs, such as the public health consequences of increased air pollution in Ahwatukee, are dismissed entirely because they are uncertain. Meanwhile, economic benefits, such as the projected reductions in congestion on the I-10, are falsely presented as certain outcomes, despite the deeply uncertain nature of such projections. Finally, the DEIS falls far short of established “best practices” for the analysis of public projects as defined by the U.S. Office of Management and Budget (Circular A-4) and the U.S. Environmental Protection Agency’s <i>Guidelines for Preparing Economic Analysis</i> (2010). I think it would be highly irresponsible to proceed with building the freeway without first conducting a serious economic analysis that quantifies the benefits and costs, and fully addresses uncertainty.</p> <p>Please find attached 12 specific comments that explain my concerns with selected aspects of your DEIS. I look forward to seeing your responses in the final EIS. I would be glad to clarify any of the issues I raise to your staff. Feel free to contact me with questions.</p> <p>Best Regards,</p> <p> Nicolai V. Kuminoff kuminoff@gmail.com</p>

Code	Issue	Response
489	Purpose and Need	<p>At the beginning of the environmental impact statement process, the need for a major transportation facility was reexamined to determine whether such a facility is still needed. Validation of those findings occurred throughout the entire environmental impact statement process. Analysis of the purpose and need for the proposed action followed National Environmental Policy Act and Federal Highway Administration implementing guidance on the subject matter and used state-of-the-practice analytical tools, as pointed out in Table 1-3, “Traffic Analysis Tools,” on page 1-13 of the Draft Environmental Impact Statement. The results of the analysis determined that a transportation problem does exist and that problem will continue in the foreseeable future (see section, <i>Conclusions</i>, on page 1-21). The comment implies that the freeway condition was predetermined. As noted on page 3-1 in the section, <i>Reconfirm the Purpose and Need for the Proposed Action</i>, a continuous validation process was undertaken throughout the environmental impact statement process to ensure past conclusions in the environmental impact statement process remained valid.</p> <p>The social, environmental, and economic effects of all alternatives, including the No-Action Alternative, are presented in the Draft and Final Environmental Impact Statements.</p>

Code	Comment Document
490	<p><u>Comment #1:</u> The DEIS implies that a majority of Maricopa County residents support building the proposed South Mountain Freeway without having any factual basis to support this implication. There are numerous examples of this, especially in the early chapters of the DEIS. One example is the “What do the results of Propositions 300 and 400 tell us” sidebar on page 1-9. The problem is that the proposed South Mountain Freeway was a fairly minor detail in the information provided to voters on the broader regional transportation plan. Voters have never had an opportunity to express their opinions on the South Mountain Freeway separately from other regional transportation projects that were bundled as part of these propositions and were in more immediate need of funding at the time the propositions were presented to voters. Furthermore, neither proposition provided voters with basic details on the South Mountain Freeway such as the expected construction cost and the number of lanes. Furthermore, at the time people voted on proposition 300 the town of Ahwatukee was largely undeveloped. Likewise, the regional transportation plan provided to voters as part of the Proposition 400 election of 2004 failed to anticipate the location, size, use, financial cost and social costs of building the freeway. It is also noteworthy that both votes occurred before the onset of the great recession. The bottom line is that there is no reason to expect that Maricopa county voters would support building the South Mountain Freeway, if they were given the opportunity to vote today. In addition, the question of whether or not voters liked the idea of a new freeway extension 30 years ago or 10 years ago is entirely irrelevant to the question of whether or not it makes sense to build the freeway today.</p> <p><u>Comment #2:</u> The effort to model the effect of the freeway on ambient concentrations of criteria air pollutants is inadequate and misleading. For example, the discussion of carbon monoxide (CO) in section 4-65 of the DEIS points out that impacts were modeled using information from Maricopa County’s current network of air quality monitoring sites in the region. Yet the discussion fails to mention that Maricopa County does not have any air quality monitoring sites in the Ahwatukee foothills (http://alert.fcd.maricopa.gov/alert/Google/v3/air.html). This is a serious flaw in the modeling assessment because the prevailing wind patterns and foothills topography will likely cause most of the emissions of pollutants to be blown into pockets of</p>
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490	Public Involvement	<p>The section, <i>Summary of Past Agency and Public Involvement Pre-EIS Process</i>, outlines the outreach by the Maricopa Association of Governments and others since the 1980s over the South Mountain Freeway. In that outreach, through the development of the <i>Regional Transportation Plan</i>, people were provided opportunities to express concerns over the specifics of the proposed freeway as well as learn about the costs and design of the facility through the years. Construction cost estimates are subject to constant updates just as, for reasons noted in the comment, economic conditions are subject to change. The amount of funding set aside for the proposed action in the <i>Regional Transportation Plan</i> is in line with projected costs.</p> <p>Regarding the sidebar on page 1-9 of the Draft Environmental Impact Statement referenced in the comment, the text makes no reference to the proposed action. The comment asserts that the page 1-9 sidebar is an example of the Draft Environmental Impact Statement “implying that a majority of Maricopa County residents supports building the proposed freeway.”</p> <p>The sidebar referenced says 1) there is “continued public support for investment in regional transportation projects,” 2) “voters in 90 percent of the county’s 1,058 voting precincts voted in favor of Proposition 400 and the projects it would fund,” and 3) “voters in 81 percent of the 31 voting precincts in the Study Area favored Proposition 400 and the projects it would fund.”</p>
491	Air Quality	<p>The air quality assessment for impacts from carbon monoxide followed the U.S. Environmental Protection Agency guidelines in Guideline for Modeling Carbon Monoxide from Roadway Intersections (A-OAQPS, 1992). Inputs to the model were based on U.S. Environmental Protection Agency-recommended values or were selected to provide a conservative estimate of impacts. Modeling methodology and results were reviewed by the Federal Highway Administration, Arizona Department of Transportation, and Maricopa Association of Governments. As noted on page 4-65 of the Draft Environmental Impact Statement, over 700 receptors were modeled for carbon monoxide concentrations. Receptor placement met the criteria for selecting modeling locations as specified in 40 Code of Federal Regulations Part 93.123(a). The air quality analyses were updated for the Final Environmental Impact Statement, including a quantitative particulate matter (PM₁₀) analysis, and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement.</p>

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492	<p>localized air pollution above residential neighborhoods in Ahwatukee in between the freeway and South Mountain Park.</p> <p><u>Comment #3:</u> Failure to model the impact of the freeway on ground level ozone concentrations above residential neighborhoods in Ahwatukee is a serious problem as emissions generated by the freeway may very well exceed national standards for 8-hour ambient ozone concentrations. As noted earlier, the prevailing wind patterns and topography of the region are likely to cause most of the emissions to sit in air pockets above residential neighborhoods in Ahwatukee. Furthermore, these neighborhoods are highly populated by families with young children who are identified by the Environmental Protection Agency as being a “sensitive group” with respect to ozone (Federal Registrar, Vol. 64, No. 149, Wednesday, August 4, 1999, Rules and Regulations).</p> <p><u>Comment #4:</u> The lack of air quality monitors in the Ahwatukee foothills area undermines the credibility of the entire air quality assessment provided in the DEIS. Air quality monitors are needed to inform the assessment of potential effects of the freeway on air quality. The current assessment does not make a serious attempt to model air quality impacts in Ahwatukee, which contains the neighborhoods that will experience the largest negative effects of increased air pollution generated by the freeway.</p> <p><u>Comment #5:</u> The DEIS’s overall conclusion that building the freeway will not cause an increase in violations of federal ambient air quality standards is misleading. This conclusion simply exploits the current placement of air quality monitors. By providing an incentive for truckers and non-local drivers to avoid traveling through central Phoenix, the South Mountain freeway will divert air pollution away from the areas that have air quality monitors and into areas that do not have air quality monitors, such as the Ahwatukee foothills. Ambient air quality will surely worsen in Ahwatukee and may very well violate federal standards for the criteria pollutants. Of course this will not cause any violations if there are no air quality monitors to measure the violations. This highlights the need for a more serious assessment of air pollution impacts from the proposed freeway, and it also highlights the need to place air quality monitors at several locations in the Ahwatukee foothills.</p>

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492	Air Quality	<p>As noted on page 4-76 of the Final Environmental Impact Statement, since ozone is a regional pollutant, there is no requirement to analyze potential impacts and no possibility of localized violations of ozone to occur at the project level. The Maricopa Association of Governments is responsible for developing plans to reduce emissions of ozone precursors in the Maricopa area. The Preferred Alternative is included in the <i>Regional Transportation Plan</i> that has been determined by the U.S. Department of Transportation to conform to the State Implementation Plan on February 12, 2014.</p> <p>A common theme in public comments on the proposed project has been the potential impacts of the project on children's health, primarily through vehicle emissions and noise. Many commenters raised concerns about the proximity of the project to schools or other aspects of the project that may affect children. In addition, the U.S. Environmental Protection Agency requested that the Final Environmental Impact Statement address Executive Order 13045, <i>Protection of Children from Environmental Health Risks and Safety Risks</i>.</p> <p>Throughout the Final Environmental Impact Statement, potential impacts on and subsequent mitigation for human health are disclosed and identified, as inherent in the environmental impact statement process. The Final Environmental Impact Statement incorporates an assessment of the potential impacts of the proposed project on all populations, including children. The Final Environmental Impact Statement addresses potential impacts of the project on children in the Chapter 4 environmental consequences analyses.</p> <p>The U.S. Environmental Protection Agency's Toxicity and Exposure Assessments for Children's Health report (see page 4-73 of the Final Environmental Impact Statement) indicated that indoor air concentrations of benzene are usually higher than outdoor levels and that indoor air in smokers' homes is a significant contributor to children's exposures. It mentioned children when identifying the effects of acute exposure to naphthalene. The Final Environmental Impact Statement acknowledges and fully discloses public scoping comments that raised the topic of health effects on neighborhoods and adjacent schools (see page 4-31 of the Final Environmental Impact Statement).</p> <p>The Final Environmental Impact Statement evaluates Clean Air Act criteria air pollutant concentrations in Maricopa County and the Phoenix area (see pages 4-75 to 4-77 of the Final Environmental Impact Statement). With regard to air quality impacts, the Final Environmental Impact Statement addresses children's health impacts within the broader discussion regarding health impacts under the National Ambient Air Quality Standards. Clean Air Act Section 109(b)(1) requires the U.S. Environmental Protection Agency to promulgate primary National Ambient Air Quality Standards at levels that allow an adequate margin of safety and are requisite to protect the public health. As noted by the U.S. Environmental Protection Agency in its 2013 rulemaking for particulate matter, Clean Air Act Section 109's legislative history demonstrates that the primary standards are “to be set at the maximum permissible ambient air level... which will protect the health of any [sensitive] group of the population” (78 <i>Federal Register</i> 3086 and 3090) (quoting S. Rep. No. 91-1196, 91st Cong., 2 Sess. 10 [1970]) (alterations in original). Accordingly, the Final Environmental Impact Statement National Ambient Air Quality Standards-based evaluation of criteria air pollutants includes a health-based review of sensitive populations, including children, given the National Ambient Air Quality Standards inherent consideration</p>

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	<p>localized air pollution above residential neighborhoods in Ahwatukee in between the freeway and South Mountain Park.</p> <p><u>Comment #3:</u> Failure to model the impact of the freeway on ground level ozone concentrations above residential neighborhoods in Ahwatukee is a serious problem as emissions generated by the freeway may very well exceed national standards for 8-hour ambient ozone concentrations. As noted earlier, the prevailing wind patterns and topography of the region are likely to cause most of the emissions to sit in air pockets above residential neighborhoods in Ahwatukee. Furthermore, these neighborhoods are highly populated by families with young children who are identified by the Environmental Protection Agency as being a “sensitive group” with respect to ozone (Federal Registrar, Vol. 64, No. 149, Wednesday, August 4, 1999, Rules and Regulations).</p> <p>493 <u>Comment #4:</u> The lack of air quality monitors in the Ahwatukee foothills area undermines the credibility of the entire air quality assessment provided in the DEIS. Air quality monitors are needed to inform the assessment of potential effects of the freeway on air quality. The current assessment does not make a serious attempt to model air quality impacts in Ahwatukee, which contains the neighborhoods that will experience the largest negative effects of increased air pollution generated by the freeway.</p> <p>494 493 <u>Comment #5:</u> The DEIS’s overall conclusion that building the freeway will not cause an increase in violations of federal ambient air quality standards is misleading. This conclusion simply exploits the current placement of air quality monitors. By providing an incentive for truckers and non-local drivers to avoid traveling through central Phoneix, the South Mountain freeway will divert air pollution away from the areas that have air quality monitors and into areas that do not have air quality monitors, such as the Ahwatukee foothills. Ambient air quality will surely worsen in Ahwatukee and may very well violate federal standards for the criteria pollutants. Of course this will not cause any violations if there are no air quality monitors to measure the violations. This highlights the need for a more serious assessment of air pollution impacts from the proposed freeway, and it also highlights the need to place air quality monitors at several locations in the Ahwatukee foothills.</p>
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492 (cont.)		<p>of those factors. Furthermore, the National Ambient Air Quality Standards-based assessment ensures adequate consideration of health-based issues as “[t]he requirement that primary standards provide an adequate margin of safety was intended to address uncertainties associated with inconclusive scientific and technical information ... and to protect against hazards that research has not yet identified” (78 <i>Federal Register</i> 3090).</p> <p>Sensitive receivers for air and noise are already included in the air quality and noise analyses in accordance with State and federal guidance. Both sections, <i>Air Quality</i> and <i>Noise</i>, beginning on Final Environmental Impact Statement pages 4-68 and 4-88, respectively, have addressed requirements under the National Environmental Policy Act. As stated on page 4-89 of the Final Environmental Impact Statement, over 220 sensitive receivers were evaluated at exterior locations from a traffic noise perspective. All of the receivers represent noise-sensitive land uses in proximity to the proposed project, including homes, schools, and parks, and these receivers would have higher noise levels than similar facilities more distant from the proposed action. Receptor placement met the criteria for selecting modeling locations as specified in 40 Code of Federal Regulations § 93.123(a). The carbon monoxide analysis was updated in the Final Environmental Impact Statement. Although a qualitative analysis of particulate matter (PM₁₀) was presented in the Draft Environmental Impact Statement, a quantitative project-level particulate matter (PM₁₀) hot-spot analysis is included in the Final Environmental Impact Statement. The results of the air quality updates are summarized in the prologue to the Final Environmental Impact Statement (beginning on page xiii) and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement. The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones. Through analysis, the Federal Highway Administration has determined that the proposed project would not produce disproportionate impacts on children.</p>
493	Air Quality	<p>Data from various Maricopa County Air Quality Department monitoring sites were used in the air quality analyses. Siting, operation, and recording information from monitoring sites are the responsibility of the Maricopa County Air Quality Department. See <maricopa.gov/aq/>. The monitoring information used in the air quality analyses is discussed in greater detail in the air quality technical report prepared for the project which is available on the project Web site at <azdot.gov/southmountainfreeway>. The results of the analyses are summarized in the Final Environmental Impact Statement.</p>
494	Air Quality	<p>The air quality assessment for impacts from carbon monoxide followed the U.S. Environmental Protection Agency guidelines in Guideline for Modeling Carbon Monoxide from Roadway Intersections (A-OAQPS, 1992). Inputs to the model were based on U.S. Environmental Protection Agency-recommended values or were selected to provide a conservative estimate of impacts. Modeling methodology and results were reviewed by the Federal Highway Administration, Arizona Department of Transportation, and Maricopa Association of Governments. Included in the analyses are data on the proposed vehicles using the proposed freeway, including heavy trucks.</p>
(Response 494 continues on next page)		

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495	<p><u>Comment #6:</u> Pages 4-69 and 4-70 provide a deeply flawed rationale for ignoring the impact of the freeway on human health outcomes. The DEIS claims that decision makers should not be provided with information on health outcomes of building the freeway because the magnitudes of those outcomes are judged by DOT to be highly uncertain. I will explain three problems with this logic:</p> <p>A. Ignoring uncertainty violates federal standards for evaluating public projects, as outlined by the United States Office of Management and Budget’s Circular A-4 (http://www.whitehouse.gov/omb/circulars_a004_a-4) and the United States Environmental Protection Agency’s <i>Guidelines for Preparing Economic Analysis</i>. For example, OMB Circular A-4 has a special section devoted to the appropriate treatment of uncertainty in the evaluation of public projects. It clearly states that uncertainty outcomes should be quantified and this information should be provided for public review and to decision makers. For example, it instructs analysts involved in the preparation of impact statements that “<i>the important uncertainties connected with your regulatory decisions need to be analyzed and presented as part of the overall regulatory analysis</i>” and that “<i>by assessing the sources of uncertainty and the way in which benefit and cost estimates may be affected under plausible assumptions, you can shape your analysis to inform decision makers and the public about the effects and the uncertainties of alternative regulatory actions</i>” and that “<i>wherever possible, you should use appropriate statistical techniques to determine a probability distribution of the relevant outcome.</i>” It also states that “<i>when uncertainty has significant effects on the final conclusion about net benefits, your agency should consider additional research prior to rulemaking. The cost of being wrong may outweigh the benefits of a faster decision. This is true especially for cases with irreversible or large upfront investments.</i>”</p> <p>B. The South Mountain Freeway is likely to have large negative health effects. The large impacts of air pollution on morbidity and mortality are well documented as is the fact</p>

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494 (cont.)		As noted on page 4-65 of the Draft Environmental Impact Statement, over 700 receptors were modeled for carbon monoxide concentrations. Receptor placement met the criteria for selecting modeling locations as specified in 40 Code of Federal Regulations Part 93.123(a). The carbon monoxide analysis was updated in the Final Environmental Impact Statement. Although a qualitative analysis of particulate matter (PM ₁₀) was presented in the Draft Environmental Impact Statement, a quantitative project-level particulate matter (PM ₁₀) hot-spot analysis is included in the Final Environmental Impact Statement. The results of the air quality updates are summarized in the prologue to the Final Environmental Impact Statement (page xiii) and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement.
495	Air Quality, Health Risk Assessment	<p>The carbon monoxide analysis was updated in the Final Environmental Impact Statement. Although a qualitative analysis of particulate matter (PM₁₀) was presented in the Draft Environmental Impact Statement, a quantitative project-level particulate matter (PM₁₀) hot-spot analysis is included in the Final Environmental Impact Statement. The results of the air quality updates are summarized in the prologue to the Final Environmental Impact Statement (page xiii) and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement. The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones.</p> <p>The emission modeling developed for the proposed action showed that for the mobile source air toxics study area, there would be little difference in total annual emissions of mobile source air toxics emissions between the Preferred and No-Action Alternatives (less than a 1 percent difference) in 2025 and 2035. With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions (see discussion beginning on page 4-77 of the Final Environmental Impact Statement).</p> <p>The Role of Health Risk Assessment in a National Environmental Policy Act Context</p> <p>The Federal Highway Administration’s National Environmental Policy Act documents are developed under two guiding regulations: the Council on Environmental Quality’s National Environmental Policy Act regulations applicable to all federal agencies (40 Code of Federal Regulations Parts 1500–1508) and the Federal Highway Administration’s implementing regulations governing Federal Highway Administration National Environmental Policy Act documents (23 Code of Federal Regulations Part 771). In its mobile source air toxics guidance, the Federal Highway Administration discusses 40 Code of Federal Regulations Part 1502.22 and acknowledges that while much work has been done to assess the overall health risk of mobile source air toxics, analytical tools and techniques for assessing project-specific health outcomes as a result of lifetime exposures to mobile source air toxics remain limited. These limitations impede the ability to evaluate the potential health risks attributable to exposure to mobile source air toxics as part of the decision-making process in the National Environmental Policy Act context. However, as with any analysis that the Federal Highway</p>

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495 (cont.)		<p>Administration conducts for National Environmental Policy Act purposes, the Federal Highway Administration’s approach for mobile source air toxic analysis in National Environmental Policy Act documents is informed not just by 40 Code of Federal Regulations Part 1502.22, but by all applicable Council on Environmental Quality requirements.</p> <p>The appropriateness of air toxics health risk assessment as an analysis method for National Environmental Policy Act documents is discussed below, in the context of Council on Environmental Quality requirements for these documents. In addition to the 40 Code of Federal Regulations Part 1502.22 provisions regarding uncertainty and limitations discussed in the Federal Highway Administration’s MSAT Interim Guidance Appendix C, three other provisions of the Council on Environmental Quality regulations are particularly relevant to the topic of health risk assessment:</p> <p><i>40 Code of Federal Regulations § 1500.1(b): NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA. Most important, NEPA documents must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail.</i></p> <p><i>40 Code of Federal Regulations § 1502.1: An environmental impact statement is more than a disclosure document. It shall be used by Federal officials in conjunction with other relevant material to plan actions and make decisions.</i></p> <p><i>40 Code of Federal Regulations § 1502.2: (a) Environmental impact statements shall be analytic rather than encyclopedic. (b) Impacts shall be discussed in proportion to their significance.(c) Environmental impact statements shall be kept concise and shall be no longer than absolutely necessary to comply with NEPA and with these regulations.</i></p> <p>Section 1500.1(b) states that information for decision making must be of high quality and based on accurate scientific analysis. Air toxics health risk assessments can involve large uncertainties. The mobile source air toxic health risk assessment uncertainty builds on itself—each step of the analysis involves uncertainties, including modeling traffic and then modeling emissions, and using this estimated output to model dispersion/concentrations, which provide information for estimating or assuming exposures to those concentrations, and finally predicting health outcomes. Major uncertainties are associated with traffic and emissions projections over a 70-year period, and dispersion models are typically held to a “factor of 2” performance standard. Health impacts of mobile source air toxics in the U.S. Environmental Protection Agency Integrated Risk Information System are based on a 70-year lifetime exposure, which introduces significant uncertainty (e.g., on average, people in the United States change residence approximately once every 8 years and change jobs once every 3). Finally, as noted above, the U.S. Environmental Protection Agency’s Integrated Risk Information System provides toxicity (risk) values for various pollutants and routes of exposure; in a health risk assessment, the Federal Highway Administration would compare calculated</p>

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495 (cont.)		<p>concentrations of mobile source air toxic pollutants to the Integrated Risk Information System values to estimate health risk. In the Integrated Risk Information System, the U.S. Environmental Protection Agency states the toxicity values are believed to be accurate to within an order of magnitude (a factor of 10). The total cumulative uncertainty involved in highway project health risk assessment is much larger than the change in emissions attributable to projects (typically a few percentage points). In this context, the information would not necessarily have a strong nexus to the requirements for high-quality information and accurate scientific analysis.</p> <p>Section 1500.1(b) also directs agencies to focus their National Environmental Policy Act analysis and documentation on issues that are truly significant to the action in question. In the context of mobile source air toxics, the Federal Highway Administration must consider whether changes in mobile source air toxic emissions attributable to a project have the potential for significant health risk. Using cancer risk as an example, the U.S. Environmental Protection Agency estimates that the overall risk of cancer in the United States is approximately 330,000 in a million, and that air toxics (from all sources) are responsible for a risk of approximately 50 in a million. In its most recent mobile source air toxics rule-making, the U.S. Environmental Protection Agency estimated mobile source air toxic cancer risk, after implementation of emissions controls, at approximately 5 in a million (or 0.0015 percent of overall cancer risk from any cause). For the Preferred Alternative, the mobile source air toxic emissions analysis for the Study Area found little difference in total annual emissions of mobile source air toxic emissions between the Preferred and No Action Alternatives (less than a 1 percent difference) in 2025 and 2035. With the Preferred Alternative in 2035, modeled mobile source air toxic emissions would decrease by more than 80 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions (see the discussion beginning on page 4-77 of the Final Environmental Impact Statement).</p> <p>In summary, available information from the U.S. Environmental Protection Agency indicates that mobile source air toxics are a small component of overall cancer risk, and the analysis for the Final Environmental Impact Statement indicates both that the Preferred Alternative would result in a small change in the emissions contributing to this risk and that emissions will decline by a large amount regardless of alternative.</p>

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495 (cont.)		<p>As described above and in the air quality technical report, results from the health risk assessment would be influenced more by the uncertainty introduced into the process through assumptions and speculations rather than by genuine insight into the actual health impacts directly attributable to mobile source air toxic exposure associated with a project. Therefore, outcomes of such a health risk assessment do not provide useful information for decision makers, as required by Section 1502.1. The Federal Highway Administration emissions analysis meets the requirement to produce information that is useful for both disclosure and decision making because it allows the public and decision makers to see which alternative has less mobile source air toxic emissions, with much less uncertainty than a health risk assessment.</p> <p>Given the uncertainty of a mobile source air toxic health risk assessment, the Federal Highway Administration instead addresses the potential impacts of mobile source air toxics through an emissions assessment in its National Environmental Policy Act documents. For smaller projects with a lower likelihood of a meaningful impact, this discussion is qualitative. For larger projects, emissions analysis is conducted. The Federal Highway Administration approach is consistent with the Council on Environmental Quality’s direction in Section 1502.2(b) to discuss impacts in proportion to their significance. The results of an emissions analysis can be summarized concisely in a National Environmental Policy Act document and provide useful information for decision makers (e.g., an alternative that has lower emissions is likely to be “better” from a mobile source air toxics health risk standpoint than one that has higher emissions).</p> <p>While the U.S. Environmental Protection Agency and the Federal Highway Administration both agree on the usefulness of addressing mobile source air toxics in National Environmental Policy Act documents for highway projects, the agencies disagree about the value of health risk assessment as a method for doing so.</p>

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495 (cont.)		<p>Another consideration with respect to health impacts is that the Preferred Alternative would also reduce in-vehicle mobile source air toxics exposure as opposed to the No Action Alternative. The U.S. Environmental Protection Agency has found that in-vehicle benzene concentrations were between 2.5 and 40 times higher than nearby ambient concentrations, based on a review of studies discussed in the Regulatory Impact Analysis for the U.S. Environmental Protection Agency’s 2007 mobile source air toxics rule-making (Final Regulatory Impact Analysis, Environmental Protection Agency 420-R-07-002, 3-17 [February 2007]). Construction of the Preferred Alternative would result in a reduction in benzene exposure to drivers and passengers for two reasons: decreased travel times (motorists would spend less time in traffic to reach their destinations) and lower emissions rates (attributable to speed improvements). Reducing on-road exposure would provide a health benefit for motorists using the roadway network. Congestion relief resulting from the proposed freeway would provide localized air quality emissions reductions on area freeways and arterial streets and at interchanges, benefiting users of area highways and those living near congested roads.</p> <p>The Federal Highway Administration determined that a supplemental environmental impact statement is not required at this time because there were no changes to the proposed action that will result in significant environmental impacts not evaluated in the Draft Environmental Impact Statement nor is there new information relevant to environmental concerns and bearings on the proposed action or its impacts that will result in significant environmental impacts not evaluated in the Draft Environmental Impact Statement.</p>

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	<p><u>Comment #6:</u> Pages 4-69 and 4-70 provide a deeply flawed rationale for ignoring the impact of the freeway on human health outcomes. The DEIS claims that decision makers should not be provided with information on health outcomes of building the freeway because the magnitudes of those outcomes are judged by DOT to be highly uncertain. I will explain three problems with this logic:</p>
496	<p>A. Ignoring uncertainty violates federal standards for evaluating public projects, as outlined by the United States Office of Management and Budget’s Circular A-4 (http://www.whitehouse.gov/omb/circulars_a004_a-4) and the United States Environmental Protection Agency’s <i>Guidelines for Preparing Economic Analysis</i>. For example, OMB Circular A-4 has a special section devoted to the appropriate treatment of uncertainty in the evaluation of public projects. It clearly states that uncertainty outcomes should be quantified and this information should be provided for public review and to decision makers. For example, it instructs analysts involved in the preparation of impact statements that “<i>the important uncertainties connected with your regulatory decisions need to be analyzed and presented as part of the overall regulatory analysis</i>” and that “<i>by assessing the sources of uncertainty and the way in which benefit and cost estimates may be affected under plausible assumptions, you can shape your analysis to inform decision makers and the public about the effects and the uncertainties of alternative regulatory actions</i>” and that “<i>wherever possible, you should use appropriate statistical techniques to determine a probability distribution of the relevant outcome.</i>” It also states that “<i>when uncertainty has significant effects on the final conclusion about net benefits, your agency should consider additional research prior to rulemaking. The cost of being wrong may outweigh the benefits of a faster decision. This is true especially for cases with irreversible or large upfront investments.</i>”</p>
495	<p>B. The South Mountain Freeway is likely to have large negative health effects. The large impacts of air pollution on morbidity and mortality are well documented as is the fact</p>

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496	Impacts	Comment is duly noted. The Draft Environmental Impact Statement notes matters of uncertainty throughout the entire document. Examples include study findings in the sections, <i>Air Quality, Noise, Visual Resources, Land Use, Displacements and Relocations, and Cultural Resources</i> in Chapter 4. In Chapter 3, <i>Alternatives</i> , reference is made to continued monitoring of design and cost to account for needed updates. On page 4-1, in the text box, “ <i>Can the Impacts Change and, If So, How?</i> ”, text is presented on how such dynamics are tracked.

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	<p>that these impacts are largest for sensitive groups such as children and seniors. This is of special concern due to the large proportion of families with young children and communities of seniors in Ahwatukee. See the EPA's (2011) <i>Second Prospective Study 1990-2020 of the Clean Air Act</i> and the associated appendices for the epidemiological consensus on health impacts and calibrated dose-response functions. The range of potential health impacts should be quantified and monetized using standard measures of the "value of a statistical life" consistent with best practices in regulatory evaluation established in the OMB and EPA guidelines. Even the lower bound on number of lives lost is likely to be sufficiently high to raise serious concerns for policy makers.</p>
495	<p>C. The effects of the freeway on health outcomes are no more uncertain than the effects of the freeway on commute times. Yet, there is no mention of uncertainty in commute times. Throughout the DEIS, the economic benefits of building the freeway are conveyed with a false sense of precision whereas the environmental costs are dismissed altogether because they are uncertain. This asymmetric treatment of uncertainty has the effect of biasing the DEIS in favor of building the freeway with the Pecos road alignment.</p>
497	<p><u>Comment #7</u>: The DEIS fails to adequately address the uncertainty of benefits from building the freeway. For example, the actual reduction in commute time that would be realized if the freeway were to be build will depend on several sources of uncertainty, including but not limited to: (i) future patterns of residential development; (ii) future location choices made by firms; (iii) future residential and job location choices made by workers; (iv) future trends in telecommuting; (v) future trends in "flex-time" and the ability of workers to commute during off-peak hours; (vi) future trends in the national economy; (vii) future trends in in the international economy and trade that influence the rate of trucking through Phoenix; (viii) future trends in automobile design; (ix) the impact of building the freeway on the desirability of living in Ahwatukee; and (x) future trends in the price of gasoline, electricity, and other factors affecting commuting costs. These sources of uncertainty should be carefully analyzed and policy makers should be informed</p>

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497	Environmental Analysis	<p>40 Code of Federal Regulations § 1500.1(b): NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA. Most important, NEPA documents must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail.</p> <p>The Council on Environmental Quality regulations state information for decision making must be of high quality and based on accurate scientific analysis.</p> <p>The models, methods, and assumptions used throughout the Draft Environmental Impact Statement account for reasonably foreseeable future conditions and dismiss speculative considerations.</p>

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	<p>about the statistical distribution of possible outcomes for commute times. More broadly, sources of uncertainty should be addressed throughout the discussion of benefits of building the freeway.</p>
498	<p><u>Comment #8:</u> The DEIS systematically overstates the likely benefits of building the freeway to Phoenix commuters. The estimated benefits are based on statistics for projected future traffic patterns provided by the Maricopa Association of Governments. However, these statistics are primarily extrapolations of past trends. In other words, they are “made up”. They are not derived from a consistent model of residential location choice or a realistic model of commuting choices. It is difficult to believe that many workers would make residential and job location choices that would induce them to use the new freeway. Projections for future traffic congestion also fail to incorporate future growth in the share of workers who work from home or are allowed the flexibility to commute during off-peak hours. Furthermore, estimates for the opportunity cost of time used to quantify the value of reduced commute times are not consistently linked to the actual commuters who use the freeway during peak hours, but are likely driven by high-income commuters living in places such as Scottsdale who will not use the new freeway if it is build. In addition, the models of traffic congestion in the DEIS are inadequate for estimating the impact of the freeway on commute times. The DEIS fails to provide even the most basic facts about commuting. For example, what fraction of today’s metro area commuters would experience a shorter commute (in terms of physical distance) if the South Mountain Freeway were built? This information can easily be obtained from the U.S. Census Bureau’s annual Public Use Microdata Sample of respondents to the <i>American Community Survey</i>, which provides information on workers’ house locations, job locations, time leaving home to go to work, and travel times.</p>
499 498	<p><u>Comment #9:</u> Throughout the DEIS, the analysis of benefits of building the freeway is based on a false premise that the demand for transportation will be the same whether or not the freeway is built. This results in overstatement of the benefits of building the freeway. In reality, building the freeway is likely to change residential development patterns which, in turn, will increase the demand for using the freeway relative to the demand if the freeway had not been built. In other words, building the freeway will increase the demand for using the freeway due to increases in</p>

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498	Purpose and Need	<p>The analyses in the Draft Environmental Impact Statement used socioeconomic and traffic projections at the regional analysis zone and traffic analysis zone levels. At the time of publication of the Draft Environmental Impact Statement, Census 2010-based socioeconomic data at the regional analysis zone and traffic analysis zone levels had not been adopted by the Maricopa Association of Governments and were not available to the project team. Therefore, the data used in the Draft Environmental Impact Statement were the most appropriate information available.</p> <p>The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. While new projections based on the 2010 Census showed a lower anticipated population in 2035 than the previous projections, the need for the freeway has not changed. The traffic analysis demonstrated that the proposed project is needed today.</p> <p>The models, methods, and assumptions used throughout the Draft Environmental Impact Statement account for reasonably foreseeable future conditions and rightfully dismiss speculative considerations. As examples, the Maricopa Association of Governments, as the federally designated regional transportation planning agency, is nationally recognized as a leader in air quality modeling and traffic modeling and forecasting. The models used account for the assumptions made in the comment.</p>
499	Traffic	<p>The Federal Highway Administration and the U.S. Environmental Protection Agency approved the air quality conformity determination that includes the Maricopa Association of Governments regional travel demand model that produced the traffic projections used in the traffic analysis for the project (see page 3-27 of the Draft Environmental Impact Statement). The model is run with and without the proposed freeway. Traffic projections are regularly updated by the Maricopa Association of Governments based on studies of travel patterns and changes in land use conditions. The traffic projections in the Draft Environmental Impact Statement are from a model adopted in 2011.</p>

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	<p>driving by current residents, increases in commercial traffic, and increased migration to areas near the freeway. These “feedback effects” will increase congestion on the freeway, diminishing its benefits, especially for existing residents of Phoenix. This effect is well known to transportation economists as “The Fundamental Law of Road Congestion”. Yet recognition of this effect is completely missing from the transportation models throughout the DEIS. In perhaps the most comprehensive empirical study of the causal relationship between road projects and traffic congestion, Duranton and Turner (2011) concluded that adding a new road with the characteristics of the South Mountain Freeway is unlikely to relieve congestion. See: Duranton, Gilles, and Matthew A. Turner. “The Fundamental Law of Road Congestion: Evidence from US Cities.” <i>American Economic Review</i>. 101 (October 2011): 2616-2652.</p> <p>500 <u>Comment #10:</u> There is overwhelming evidence in economics journals and federal regulatory evaluations that freeways produce negative externalities that substantially diminish the quality of life for those living nearby. Some of these effects will likely be reflected in reductions (or slower growth) in property values for residential neighborhoods experiencing diminished quality of life. It is standard practice to use hedonic property value methods and contingent valuation methods to quantify these costs as part of regulatory evaluations. However, no such effort is undertaken in the draft EIS. The following impacts should be quantified and included in the EIS using best practices in methods for economic valuation of environmental impacts of public projects as outlined in EPA’s Guidelines for Preparing Economic Analysis: (1) effect of air pollution on property values; (2) effect of noise pollution on property values; (3) cost of water pollution produced from freeway runoff; (4) value of lost recreation benefits to joggers and bicyclists who currently use Pecos road for recreation; (5) value of diminished recreation benefits for people using South Mountain Park due to visual disamenities, noise, dust, odors, and non-visible air pollution created by the freeway; and (6) the impact of building the freeway on crime in Ahwatukee and, in turn, the effect of increased crime on property values. This last point deserves some explanation. At present, weekly statistics from the police blotter indicate that there is virtually no violent crime or property crime in western Ahwatukee. The vast majority of Ahwatukee crimes occur in the eastern part of the town close to the I-10. The lack of crime in western Ahwatukee is likely due to the fact that, as the end of a big cul-de-sac, criminals have no</p>

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500	General Impacts	<p>The study used state-of-the-practice, scientific community methods and similarly accepted methods. Methods, assumptions, and data were developed early in the environmental impact statement process and peer reviewed by the Federal Highway Administration, the Arizona Department of Transportation, and other federal, State, and local agencies. Peer reviewers concluded that the methods, assumptions, and data are appropriate. The Draft Environmental Impact Statement has sufficient technical merit, does comply with “fundamental concepts and purpose of an environmental impact statement,” and does appropriately and properly inform the public.</p> <p>The Arizona Department of Transportation and Federal Highway Administration, in cooperation with the U.S. Army Corps of Engineers, the U.S. Bureau of Indian Affairs, and the Western Area Power Administration, prepared the Draft and Final Environmental Impact Statements and Section 4(f) Evaluation in accordance with the National Environmental Policy Act of 1969 [42 United States Code § 4332(2)(c)], Section 4(f) of the U.S. Department of Transportation Act of 1966 (49 United States Code § 303, as amended), and Section 404 of the Clean Water Act of 1977 (33 United States Code § 1251). All of these agencies are experienced in the review of National Environmental Policy Act documents and have found the logical sequence of decision making to be sound and in line with National Environmental Policy Act requirements. The Draft Environmental Impact Statement and Section 4(f) Evaluation 1) satisfies Federal Highway Administration and Arizona Department of Transportation’s environmental analysis requirements; 2) provides a comparison of the social, economic, and environmental impacts that may result from implementation of the proposed action—construction and operation of a major transportation facility; and 3) identifies measures to avoid, reduce, or otherwise mitigate adverse impacts.</p>
501	Traffic	<p>Hazardous Materials Commodity Flow Studies and other information are used by emergency response planners (such as the Arizona State Emergency Response Commission statewide and the Maricopa County Local Emergency Planning Commission for Maricopa County) as one of the elements considered when developing Emergency Response Plans. If the plan were amended, it would be made available to the Arizona Department of Transportation.</p> <p>In 2006, the City of Phoenix conducted a traffic circulation study to evaluate the impacts of the proposed freeway on the local street system. The City study found no adverse effects on the local street system from the freeway (see Appendix 3-1 in the Final Environmental Impact Statement).</p> <p>The traffic projections for Chandler Boulevard (see Figure 3-12 on page 3-29 of the Draft Environmental Impact Statement) do show a reduction with the proposed freeway when compared with conditions without the proposed freeway.</p>
502	Health Effects	<p>A common theme in public comments on the proposed project has been the potential impacts of the project on children's health, primarily through vehicle emissions and noise. Many commenters raised concerns about the proximity of the project to schools or other aspects of the project that may affect children. In addition, the U.S. Environmental Protection Agency requested that the Final Environmental Impact Statement address Executive Order 13045, <i>Protection of Children from Environmental Health Risks and Safety Risks</i>.</p> <p>Throughout the Final Environmental Impact Statement, potential impacts on and subsequent mitigation for human health are disclosed and identified, as inherent in the environmental impact statement process. The Final Environmental Impact Statement incorporates an assessment of the potential impacts of the proposed project on all populations, including children. The Final Environmental Impact</p>

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	<p>escape route. Building the freeway will provide such an escape route and increase the attractiveness of the area to criminals as a result. Those who argue in favor of building the freeway often claim that Ahwatukee residents should have known that these effects might eventually occur as a result of the freeway when they first purchased property in the area and that, as a result, the negative externalities are already capitalized into property values. This claim is false. The conventional wisdom of real estate agents and homebuyers in Ahwatukee is that the freeway would never be built and that the original 1985 plan to build the freeway was simply a relic of “pre-Ahwatukee” regional planning. As a result, the freeway will act as a shock to the local housing market and depress property values.</p>
501	<p><u>Comment #11:</u> In the event of heavy traffic, road work, or accidents, drivers on the South Mountain Freeway are likely to use Chandler Blvd. as a bypass. GPS devices will mechanically divert drivers off the freeway and onto Chandler. This is especially true for the Chandler Blvd segment from S. 17th Ave to Desert Foothills Parkway because this segment has 4 lanes, a speed limit of 45mph, and no stop signs or traffic lights. This will create a serious public health hazard because the aforementioned segment of Chandler goes right through the residential neighborhood of “Club West”. Joggers, bicyclists, families and children use Chandler Blvd during the morning and evening commute hours for recreation and to walk/bicycle to/from school and parks. Young children on foot or on bicycle and joggers with headphones are often seen crossing the street. The lack of stop signs and crosswalks is not currently a problem because traffic is light. However, with some freeway commuters using the Chandler Blvd corridor as a bypass, there is likely to be a surge in traffic accidents and traffic-related pedestrian deaths in this family-oriented residential neighborhood. These effects are entirely ignored in the DEIS.</p>
502	<p><u>Comment #12:</u> The DEIS violates the spirit of Presidential Executive Order #13045 by failing to identify and assess the environmental health risks and safety risks that may disproportionately affect children as a result of the freeway. An example of the environmental health risk is the increase in ambient ozone concentrations that will affect children living in Ahwatukee, particularly those who use the numerous public schools and public parks located between South</p>

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502 (cont.)		<p>Statement addresses potential impacts of the project on children in the Chapter 4 environmental consequences analyses.</p> <p>The U.S. Environmental Protection Agency's Toxicity and Exposure Assessments for Children's Health report (see page 4-73 of the Final Environmental Impact Statement) indicated that indoor air concentrations of benzene are usually higher than outdoor levels and that indoor air in smokers' homes is a significant contributor to children's exposures. It mentioned children when identifying the effects of acute exposure to naphthalene. The Final Environmental Impact Statement acknowledges and fully discloses public scoping comments that raised the topic of health effects on neighborhoods and adjacent schools (see page 4-31 of the Final Environmental Impact Statement).</p> <p>The Final Environmental Impact Statement evaluates Clean Air Act criteria air pollutant concentrations in Maricopa County and the Phoenix area (see pages 4-75 to 4-77 of the Final Environmental Impact Statement). With regard to air quality impacts, the Final Environmental Impact Statement addresses children's health impacts within the broader discussion regarding health impacts under the National Ambient Air Quality Standards. Clean Air Act Section 109(b)(1) requires the U.S. Environmental Protection Agency to promulgate primary National Ambient Air Quality Standards at levels that allow an adequate margin of safety and are requisite to protect the public health. As noted by the U.S. Environmental Protection Agency in its 2013 rulemaking for particulate matter, Clean Air Act Section 109's legislative history demonstrates that the primary standards are “to be set at the maximum permissible ambient air level... which will protect the health of any [sensitive] group of the population” (78 <i>Federal Register</i> 3086 and 3090) (quoting S. Rep. No. 91-1196, 91st Cong., 2 Sess. 10 [1970]) (alterations in original). Accordingly, the Final Environmental Impact Statement National Ambient Air Quality Standards-based evaluation of criteria air pollutants includes a health-based review of sensitive populations, including children, given the National Ambient Air Quality Standards inherent consideration of those factors. Furthermore, the National Ambient Air Quality Standards-based assessment ensures adequate consideration of health-based issues as “[t]he requirement that primary standards provide an adequate margin of safety was intended to address uncertainties associated with inconclusive scientific and technical information ... and to protect against hazards that research has not yet identified” (78 <i>Federal Register</i> 3090).</p> <p>Sensitive receivers for air and noise are already included in the air quality and noise analyses in accordance with State and federal guidance. Both sections, <i>Air Quality</i> and <i>Noise</i>, beginning on Final Environmental Impact Statement pages 4-68 and 4-88, respectively, have addressed requirements under the National Environmental Policy Act. As stated on page 4-89 of the Final Environmental Impact Statement, over 220 sensitive receivers were evaluated at exterior locations from a traffic noise perspective. All of the receivers represent noise-sensitive land uses in proximity to the proposed project, including homes, schools, and parks, and these receivers would have higher noise levels than similar facilities more distant from the proposed action.</p> <p>Each modeled school was reexamined to determine whether noise impacts would result from the proposed freeway and whether appropriate mitigation of these impacts was provided. Of the nine schools modeled in the analysis for the Final Environmental Impact Statement, all were predicted to exceed Federal Highway Administration noise abatement criteria (see Table 4-40, beginning on page 4-93). Mitigation, in the form of noise walls, was proposed for all schools. After applying this mitigation, all schools except one were mitigated according to the Arizona Department of Transportation noise policy. According to Arizona Department of Transportation policy, noise mitigation should achieve a reduction of 5 to 7 A-weighted decibels and result in a noise level of less than 64 A-weighted decibels</p>

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	<p>Mountain Park and the proposed Pecos Road alignment of the freeway. The EPA identifies children as a “sensitive group” for ambient ozone. An example of the safety risk is the increase in traffic on arterial streets that wind through residential neighborhoods in Ahwatukee, particular during periods of heavy traffic, road work, or freeway accidents when drivers will naturally use Chandler Blvd as a bypass. The traffic poses a safety risk because children frequently walk / bike / run / play on the streets that will experience increased traffic, such as Chandler Blvd from S. 17th Ave through Desert Foothills Parkway. This will increase the risk of accidental deaths of children.</p>

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502 (cont.)		<p>for residential and similar areas. These criteria were not reached for one school (receiver 67, Santa Maria Elementary School) because the policy limits wall heights to 20 feet. A wall taller than 20 feet would be required to bring levels at this receiver down to 64 A-weighted decibels. However, a 5-A-weighted decibels reduction would be provided by the 20-foot wall proposed in this area. It is important to note that this receiver would be affected only by the W71 Alternative, which is not the Preferred Alternative.</p> <p>The Arizona Department of Transportation noise policy also states that noise abatement shall be considered if “substantial increases” (defined as a 15 A-weighted decibels or greater increase) are predicted. Of the nine schools modeled, substantial increases were predicted at six schools. As discussed above, however, noise walls would reduce noise levels at all schools according to the Arizona Department of Transportation noise policy, with the exception of Santa Maria Elementary School, which would be affected only by the W71 Alternative, which is not the Preferred Alternative. According to the Federal Highway Administration's 1995 Highway Traffic Noise Analysis and Abatement Policy and Guidance, in most cases, if the exterior area can be protected, the interior will also be protected.</p> <p>Receptor placement met the criteria for selecting modeling locations as specified in 40 Code of Federal Regulations § 93.123(a). The carbon monoxide analysis was updated in the Final Environmental Impact Statement. Although a qualitative analysis of particulate matter (PM₁₀) was presented in the Draft Environmental Impact Statement, a quantitative project-level particulate matter (PM₁₀) hot-spot analysis is included in the Final Environmental Impact Statement. The results of the air quality updates are summarized in the prologue to the Final Environmental Impact Statement (page xiii) and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement. The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones. Through analysis, the Federal Highway Administration has determined that the proposed project would not produce disproportionate impacts on children.</p> <p>Many studies have investigated the prevalence of adverse health effects in the near-road environment. Given concerns about the possibility of air pollution exposure in the near-road environment, the Health Effects Institute has dedicated a number of research efforts toward investigating this issue. In November 2007, the Health Effects Institute published Special Report #16: Mobile-Source Air Toxics: A Critical Review of the Literature on Exposure and Health Effects. This report concluded that the cancer health effects attributable to mobile sources are difficult to discern because the majority of quantitative assessments are derived from occupational cohorts with high concentration exposures and because some cancer potency estimates are derived from animal models. In January 2010, the Health Effects Institute released Special Report #17, investigating the health effects of traffic-related air pollution. The goal of the research was to synthesize available information on the effects of traffic on health. Researchers looked at linkages between: 1) traffic emissions (at the tailpipe) with ambient air pollution in general, 2) concentrations of ambient pollutants with human exposure to pollutants from traffic, 3) exposure to pollutants from traffic with human-health effects and toxicological data, and 4) toxicological data with epidemiological associations. Overall, researchers felt that there was “sufficient” evidence for causality for the exacerbation of asthma. Evidence was “suggestive but not sufficient” for health outcomes such as cardiovascular mortality and others.</p>

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502 (cont.)		<p>Study authors also noted that past epidemiological studies may not provide an appropriate assessment of future health associations because vehicle emissions are decreasing over time. Finally, in 2011 three studies were published by the Health Effects Institute evaluating the potential for mobile source air toxics “hot spots.” In general, the authors confirmed that while highways are a source of air toxics, they were unable to find that highways were the only source of these pollutants. They determined that near-road exposures were often no different or no higher than background (or ambient) levels of exposure and, hence, no true hot spots were identified. These reports are available from the Health Effects Institute’s Web site at <healtheffects.org>. The Federal Highway Administration and U.S. Environmental Protection Agency provide financial support to the Health Effects Institute’s research work.</p> <p>Another source of information is the U.S. Environmental Protection Agency’s recently released report on Children’s Health and the Environment:</p> <p><i>The level of knowledge regarding the relationship between environmental exposures and health outcomes varies widely among the topics [presented in this report], and the inclusion of an indicator in the report does not necessarily imply a known relationship between environmental exposure and children’s health effects. The report provides data for selected children’s health conditions that warrant further research because the causes, including possible contributing environmental factors, are complex and not well understood at this point.</i></p> <p><i>In the case of asthma, researchers do not fully understand why children develop the condition. However, substantial evidence shows exposure to certain air pollutants, including particulate matter and ozone, can trigger symptoms in children who already have asthma. Although the report found the percentage of children reported to currently have asthma increased from 8.7 percent in 2001 to 9.4 percent in 2010 and that minority populations are particularly affected by asthma, the severity of children’s asthma and respiratory symptoms has declined. The rate of emergency room visits for asthma decreased from 114 visits per 10,000 children in 1996 to 103 visits per 10,000 children in 2008. Between 1996 and 2008, hospitalizations for asthma and for all other respiratory causes decreased from 90 hospitalizations per 10,000 children to 56 hospitalizations per 10,000 children.</i></p> <p><i>The report also looks at trends in other health conditions, such as Attention-Deficit/Hyperactivity Disorder (ADHD) and preterm births, for which rates have increased. There is no conclusive information on the role of environmental contaminants in ADHD or preterm births, and additional research is ongoing.</i></p> <p>Finally, the Federal Highway Administration notes that while the incidence of some health effects (such as asthma, autism, and attention deficit/hyperactivity disorder) in the U.S. population appear to have been increasing, motor vehicle emissions have declined. This decline in mobile source air toxics emissions is documented in Figure 4-24 of the Final Environmental Impact Statement and for other pollutants at <epa.gov/ttn/chief/trends/>. This negative correlation between emissions trends and health effects trends illustrates the complexity of the issues.</p>

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<div><p><u>Additional Comments</u></p><p>Seven</p><p>Comments by Hugh S. Mason dated July 21, 2013, resident of Phoenix and the Ahwatukee are and Associate Professor at Arizona State University, School of Life Sciences</p></div>	

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	<p>-----Original Message----- From: Hugh Mason <Hugh.Mason@asu.edu> To: projects <projects@azdot.gov> Cc: PARCtheSMF <PARCtheSMF@aol.com> Sent: Sun, Jul 21, 2013 1:44 pm Subject: Comments on DEIS for SMF</p> <p>Dear ADOT:</p> <p>503 I am a citizen and resident of Phoenix and the Ahwatukee area, and Associate Professor at Arizona State University School of Life Sciences. I am writing to ADOT regarding its draft environmental impact study (DEIS) for the South Mountain freeway (SMF). I would like to register my strong opposition to the building of the SMF. I am a member of Protecting Arizona's Resources and Children (PARC), and fully support its efforts to prevent the building of SMF. I have great concerns about the DEIS, as presented below.</p> <p>504 One of my main concerns is that the DEIS greatly underestimates the impact of the SMF on the air quality for residents living nearby. The DEIS minimizes the potential pollution that will be caused by trucks burning diesel fuel, especially those coming from Mexico having fuel that is poorly regulated and high in contaminants like sulfur. The DEIS suggests that the "truck bypass" route on I-8 and SH-85 will be preferred by truckers. However, this route is substantially longer than the proposed SMF, and is thus unlikely to be viewed as economically feasible. Due to the geographic features along the E1 Pecos road corridor, concentration of the vehicle emissions is likely to compound toxicity issues in this area. The extreme proximity of several schools to the E1 route puts a huge number of children at risk of health problems due to air pollution.</p> <p>505 The E1 route would require massive cuts in the ridges of South Mountain on the west side. This action is unfeasible for two main reasons. All of the Native American tribes in the area consider South Mountain to be sacred, and the proposed action would desecrate the land. Although that reason alone is enough to abandon the plan, another factor is more important to most of us: air quality. The blasting required for the SM ridge cuts (and other cuts along the E1 route) would generate huge amounts of airborne particulate matter. The fine dust generated by construction (especially PM10 particles that can be inhaled deeply) will produce respiratory problems for people in the area. Moreover, it will threaten federal funds for transportation that require control of air quality. Maricopa County has had great difficulty maintaining PM10 standards, and the construction of the SMF would certainly make it more difficult, if not impossible.</p> <p>The DEIS makes dire predictions for adverse effects on the regional economy if the "no action" option is chosen. However, we must remember that the SMF plan was first proposed more than 25 years ago, when fuel was relatively cheap and few people saw any problem with continuation of the freeway transportation paradigm. Data on climate change and greenhouse gases in the atmosphere have steadily accumulated over the years, to the point that it is obvious that we need a transportation paradigm shift in order to address the problems we face. We must reallocate most of our resources away from freeway construction and invest them in technologies that will minimize adverse environmental effects. I strongly advocate light rail expansion throughout the valley. Thus, not building the SMF should not be called "no action", because there are other actions that can be funded with the resources.</p> <p>I strongly urge the ADOT to abandon the SMF plan and intensify studies of other transportation options that are more environmentally friendly.</p> <p>Sincerely, Hugh S. Mason</p>

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503		Responses to specific comments appear below.
504	Trucks	<p>The road network in the Maricopa Association of Governments travel demand model includes the Interstate 8 and State Route 85 corridor. So, while the roads are not in the Study Area for the proposed action, traffic and trip distributions along the corridor are included in the traffic analysis for the proposed action. Any traffic that would shift from the Interstate 8 and State Route 85 corridor to the proposed action would be included in the vehicle mix considered in the air quality analysis.</p> <p>A truck driver traveling from Tucson to Los Angeles and choosing to use Interstate 10 and the proposed freeway would travel 15 miles less than one choosing to use the designated truck bypass along Interstate 8 and State Route 85.</p> <p>Choosing to travel on the proposed action versus Interstate 8 and State Route 85 would not translate to any substantial travel time benefits. Therefore, it is expected that "true" through-truck traffic (not having to stop in the metropolitan area) would continue to use the faster, designated, and posted bypass system of Interstate 8 and State Route 85.</p> <p>Trucks crossing from Mexico to Arizona are restricted to the commercial zones within 25 miles of the border. The Federal Motor Carrier Safety Administration is administering a United States-Mexico cross-border, long-haul trucking pilot program. The program tests and demonstrates the ability of Mexico-based motor carriers to operate safely in the United States beyond the municipalities and commercial zones along the United States-Mexico border (see <fmcsa.dot.gov/intl-programs/trucking/trucking-program.aspx>).</p> <p>Petróleos Mexicanos (better known as Pemex), the Mexican state-owned petroleum company, has guaranteed 15 parts per million in its sulfur diesel fuel in the border region (see <http://transportpolicy.net/index.php?title=Mexico:_Fuels:_ Diesel_and_Gasoline>).</p> <p>As explained on pages 4-69 and 4-77 of the Draft and Final Environmental Impact Statements, respectively, the emissions analysis conducted for the project shows that future mobile source air toxics emissions will be lower than current levels. This analysis included projected truck traffic.</p>
505	Air Quality	<p>A common theme in public comments on the proposed project has been the potential impacts of the project on children's health, primarily through vehicle emissions and noise. Many commenters raised concerns about the proximity of the project to schools or other aspects of the project that may affect children. In addition, the U.S. Environmental Protection Agency requested that the Final Environmental Impact Statement address Executive Order 13045, <i>Protection of Children from Environmental Health Risks and Safety Risks</i>.</p> <p>Throughout the Final Environmental Impact Statement, potential impacts on and subsequent mitigation for human health are disclosed and identified, as inherent in the environmental impact statement process. The Final Environmental Impact Statement incorporates an assessment of the potential impacts of the proposed project on all populations, including children. The Final Environmental Impact Statement addresses potential impacts of the project on children in the Chapter 4 environmental consequences analyses.</p> <p>The U.S. Environmental Protection Agency's Toxicity and Exposure Assessments for Children's Health report (see page 4-73 of the Final Environmental Impact Statement) indicated that indoor air concentrations of benzene are usually higher than outdoor levels and that indoor air in smokers' homes is a significant contributor to children's exposures. It mentioned children when identifying the effects of acute exposure to naphthalene. The Final Environmental Impact Statement acknowledges and fully discloses public scoping comments that raised the topic of health effects on neighborhoods and adjacent schools (see page 4-31 of the Final Environmental Impact Statement).</p> <p>The Final Environmental Impact Statement evaluates Clean Air Act criteria air pollutant concentrations in Maricopa County and the Phoenix area (see pages 4-75 to 4-77 of the</p>

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Code	Issue	Response
505 (cont.)		<p>Final Environmental Impact Statement). With regard to air quality impacts, the Final Environmental Impact Statement addresses children's health impacts within the broader discussion regarding health impacts under the National Ambient Air Quality Standards. Clean Air Act Section 109(b)(1) requires the U.S. Environmental Protection Agency to promulgate primary National Ambient Air Quality Standards at levels that allow an adequate margin of safety and are requisite to protect the public health. As noted by the U.S. Environmental Protection Agency in its 2013 rulemaking for particulate matter, Clean Air Act Section 109's legislative history demonstrates that the primary standards are "to be set at the maximum permissible ambient air level... which will protect the health of any [sensitive] group of the population" (78 <i>Federal Register</i> 3086 and 3090) (quoting S. Rep. No. 91-1196, 91st Cong., 2 Sess. 10 [1970]) (alterations in original). Accordingly, the Final Environmental Impact Statement National Ambient Air Quality Standards-based evaluation of criteria air pollutants includes a health-based review of sensitive populations, including children, given the National Ambient Air Quality Standards inherent consideration of those factors. Furthermore, the National Ambient Air Quality Standards-based assessment ensures adequate consideration of health-based issues as "[t]he requirement that primary standards provide an adequate margin of safety was intended to address uncertainties associated with inconclusive scientific and technical information ... and to protect against hazards that research has not yet identified" (78 <i>Federal Register</i> 3090).</p> <p>Sensitive receivers for air and noise are already included in the air quality and noise analyses in accordance with State and federal guidance. Both sections, <i>Air Quality</i> and <i>Noise</i>, beginning on Final Environmental Impact Statement pages 4-68 and 4-88, respectively, have addressed requirements under the National Environmental Policy Act. As stated on page 4-89 of the Final Environmental Impact Statement, over 220 sensitive receivers were evaluated at exterior locations from a traffic noise perspective. All of the receivers represent noise-sensitive land uses in proximity to the proposed project, including homes, schools, and parks, and these receivers would have higher noise levels than similar facilities more distant from the proposed action.</p> <p>Receptor placement met the criteria for selecting modeling locations as specified in 40 Code of Federal Regulations § 93.123(a). The carbon monoxide analysis was updated in the Final Environmental Impact Statement. Although a qualitative analysis of particulate matter (PM₁₀) was presented in the Draft Environmental Impact Statement, a quantitative project-level particulate matter (PM₁₀) hot-spot analysis is included in the Final Environmental Impact Statement. The results of the air quality updates are summarized in the prologue to the Final Environmental Impact Statement (page xiii) and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement. The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones. Through analysis, the Federal Highway Administration has determined that the proposed project would not produce disproportionate impacts on children.</p>
506	Cultural Resources	<p>Section 106 of the National Historic Preservation Act requires a government-to-government relationship between the Federal Government and Indian tribes as described beginning on page 4-140 of the Final Environmental Impact Statement. Section 106 requires that federal agencies take into account the effects of their undertakings on historic properties. This process requires consultation with tribal authorities. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. The consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic</p>

(Response 506 continues on next page)

Code	Comment Document
	<p>-----Original Message----- From: Hugh Mason <Hugh.Mason@asu.edu> To: projects <projects@azdot.gov> Cc: PARCtheSMF <PARCtheSMF@aol.com> Sent: Sun, Jul 21, 2013 1:44 pm Subject: Comments on DEIS for SMF</p> <p>Dear ADOT:</p> <p>I am a citizen and resident of Phoenix and the Ahwatukee area, and Associate Professor at Arizona State University School of Life Sciences. I am writing to ADOT regarding its draft environmental impact study (DEIS) for the South Mountain freeway (SMF). I would like to register my strong opposition to the building of the SMF. I am a member of Protecting Arizona's Resources and Children (PARC), and fully support its efforts to prevent the building of SMF. I have great concerns about the DEIS, as presented below.</p> <p>One of my main concerns is that the DEIS greatly underestimates the impact of the SMF on the air quality for residents living nearby. The DEIS minimizes the potential pollution that will be caused by trucks burning diesel fuel, especially those coming from Mexico having fuel that is poorly regulated and high in contaminants like sulfur. The DEIS suggests that the "truck bypass" route on I-8 and SH-85 will be preferred by truckers. However, this route is substantially longer than the proposed SMF, and is thus unlikely to be viewed as economically feasible. Due to the geographic features along the E1 Pecos road corridor, concentration of the vehicle emissions is likely to compound toxicity issues in this area. The extreme proximity of several schools to the E1 route puts a huge number of children at risk of health problems due to air pollution.</p> <p>The E1 route would require massive cuts in the ridges of South Mountain on the west side. This action is unfeasible for two main reasons. All of the Native American tribes in the area consider South Mountain to be sacred, and the proposed action would desecrate the land. Although that reason alone is enough to abandon the plan, another factor is more important to most of us: air quality. The blasting required for the SM ridge cuts (and other cuts along the E1 route) would generate huge amounts of airborne particulate matter. The fine dust generated by construction (especially PM10 particles that can be inhaled deeply) will produce respiratory problems for people in the area. Moreover, it will threaten federal funds for transportation that require control of air quality. Maricopa County has had great difficulty maintaining PM10 standards, and the construction of the SMF would certainly make it more difficult, if not impossible.</p> <p>The DEIS makes dire predictions for adverse effects on the regional economy if the "no action" option is chosen. However, we must remember that the SMF plan was first proposed more than 25 years ago, when fuel was relatively cheap and few people saw any problem with continuation of the freeway transportation paradigm. Data on climate change and greenhouse gases in the atmosphere have steadily accumulated over the years, to the point that it is obvious that we need a transportation paradigm shift in order to address the problems we face. We must reallocate most of our resources away from freeway construction and invest them in technologies that will minimize adverse environmental effects. I strongly advocate light rail expansion throughout the valley. Thus, not building the SMF should not be called "no action", because there are other actions that can be funded with the resources.</p> <p>I strongly urge the ADOT to abandon the SMF plan and intensify studies of other transportation options that are more environmentally friendly.</p> <p>Sincerely, Hugh S. Mason</p>

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Code	Issue	Response
506 (cont.)		Preservation Office and the State Historic Preservation Office on National Register of Historic Places eligibility recommendations (including traditional cultural properties), project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.
507	Air Quality	<p>The Arizona Department of Transportation and Federal Highway Administration have updated the particulate matter (PM₁₀) qualitative analysis performed for the Draft Environmental Impact Statement to a quantitative analysis for the Final Environmental Impact Statement to ensure that a state-of-the-art analysis is completed for the proposed project. The results of the analysis are summarized in the prologue to the Final Environmental Impact Statement (page xiii) and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement. The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones.</p> <p>The transportation conformity rule in 40 Code of Federal Regulations § 93.123(c)(5) states that hot-spot analyses are not required to consider construction-related activities that cause temporary increases in emissions. Temporary increases are defined as those that occur only during the construction phase and last 5 years or less at any individual site. The Arizona Department of Transportation is evaluating construction delivery methods for the proposed freeway. One concept is to deliver it as a single design-build project. This method would expedite the construction duration for the entire project to around 3 to 3.5 years. Another concept would be to deliver the project in a more traditional method, breaking the 22-mile corridor into nine segments (each 1 to 3 miles long) and constructing them in phases. Each segment would be under construction for 1 to 3 years and the total construction duration for the entire corridor would be 5 to 6 years. A discussion of construction implementation is provided beginning on page 3-59 of the Final Environmental Impact Statement. Any particular area of the Preferred Alternative would not be expected to see construction activities beyond an approximate 2-year period; therefore, the construction effects described above would be temporary and would not require additional analysis.</p>
508	Purpose and Need	<p>At the beginning of the environmental impact statement process, the need for a major transportation facility was reexamined to determine whether such a facility is still needed. Validation of those findings occurred throughout the entire environmental impact statement process. Analysis of the purpose and need for the proposed action followed National Environmental Policy Act and Federal Highway Administration implementing guidance on the subject matter and used state-of-the-practice analytical tools, as pointed out in Table 1-3, "Traffic Analysis Tools," on page 1-13 of the Draft Environmental Impact Statement. The results of the analysis determined that a transportation problem does exist and that problem will continue in the foreseeable future (see section, <i>Conclusions</i>, on page 1-21). As noted on page 3-1 in the section, <i>Reconfirm the Purpose and Need for the Proposed Action</i>, a continuous validation process was undertaken throughout the environmental impact statement process to ensure past conclusions in the environmental impact statement process remained valid.</p> <p>The reader is referred to Draft Environmental Impact Statement Chapter 3, <i>Alternatives</i>, and, specifically, the section, <i>Alternatives Development and Screening Process Conclusions</i>, beginning on page 3-26, noting "... a comprehensive set of alternatives including all modes was considered ... assurance that the screening process was an open process ... a logical, sequential, step-by-step process using data and expertise from multiple disciplines ..." to demonstrate all possibilities were considered.</p>
509		Comment noted.

Code	Comment Document
510	PMPC: May 21, 2013 <div>Phoenix Mountains Preservation Council</div> <div>Official position on the Arizona Department of Transportation's</div> <div>South Mountain Freeway Draft Environmental Impact Study</div>
511	PMPC is an organization put into place by Arizona visionaries, and for the last 40 years PMPC has continued to monitor and anticipate the impact that rapid population growth would have on our precious Mountain Preserve system.
512	PMPC is steadfastly opposed to any alignment of the Loop 202 South Mountain Freeway that allows for trespass onto the Mountain Preserve or for any excavation into the South Mountain what so ever. These mountain preserves ensures a lifestyle that 80% of Arizona voters consistently support. The mountain preserves are unique and are for people and wildlife, not for vehicle trespass. PMPC does not agree with many of the DEIS assumptions finding them objectionable and deficient in the following analysis areas.
513	<p><u>Unacceptable Pre-Decisional Actions:</u> ADOT has made some pre-decisional actions with the purchase of property before the Draft Environmental Impact Statement (DEIS) was released. Phoenix Mountains Preservation Council (PMPC) questions the legality of this action and the entire DEIS when it appears ADOT has already made considerable financial investment to establish the alignment for the South Mountain Freeway rather than follow the prescribed process.</p> <p><u>Dismal Wildlife Connectivity:</u> The DEIS does not meet the minimal requirements for coordination and analysis of wildlife resources. The Arizona Game and Fish Department was consulted in 2009 during scoping. The current connection to the Estrella Mountains allows for passage of mule deer, javelina, bobcat, and mountain lion. There is no evidence of further efforts to ascertain wildlife connectivity needs or possible mitigation. The Sonoran desert tortoise provides additional evidence of inadequate cumulative analysis given its status as a U.S. Fish & Wildlife Service's candidate species. The mountain ridge area slated for demolition meets the definition for the tortoise's habitat.</p> <p><u>Unreasonable Taking of Mountain Preservation Lands:</u> The DEIS states in Figure 5-7 Public Parkland the avoidance of taking over 30 acres of the Preserve is "not prudent and feasible". The taking of this mountainside will destroy important archeological, spiritual, cultural and recreational sites with no realistic or reasonable mitigation possible in the study. The study failed to recognize and address new two trails, Gila and Bursera Trails, created in the southwest end of the Preserve in 2010.</p> <p><u>Outdated Data Projections Used:</u> The DEIS is based on outdated data projections that are now six to eight years old. The analysis does not acknowledge the impact the major economic downturn had and it brings into question the validity of projected growth levels put forth in the DEIS. In all the alternative studies, the DEIS does not provide one alternative analysis to the demolition of the southwest ridges of South Mountain. Furthermore, nowhere in this study is there an assessment of hazardous material truck traffic nor any mention of managing this truck traffic and the consequences of a serious hazard waste incident.</p> <p>Over 3 million visitors come to South Mountain Park/Preserve annually, according to City of Phoenix statistics. Destroying any part of the mountain to align a high-capacity freeway will only have a negative impact on tourism and the many unique resources the park offers.</p> <p>We urge ADOT to stop providing studies that do not accurately or thoroughly address the impact this freeway has on South Mountain. It's time to stop the \$20 million and more in wasted tax payer's money to study the environmental impact and design for an alignment that no longer makes sense.</p>

Code	Issue	Response
510		Responses to specific comments appear below.
511		Comment noted.
512	Section 4(f) and Section 6(f)	<p>The information regarding the context and attributes of the South Mountains is described in the Draft Environmental Impact Statement. The acreage of parkland to be converted to a transportation use is reported on page 5-14 in the section, <i>Direct Use</i>. It is reported that 31.3 acres or just less than 0.2 percent of the parkland would be converted (this is a reduction in the amount of use planned for in 1988). The text goes on to point out other concerns associated with the direct use reported, and text on page 5-14 in the sidebar, "<i>The South Mountains in Phoenix's Sonoran Preserve System</i>," describes the importance of Phoenix South Mountain Park/Preserve in the region. Beginning on page 5-23 in the section, <i>Measures to Minimize Harm</i>, measures are presented to be undertaken to address the use impacts, including land replacement, on properties adjacent to the park. The section, <i>Cultural Resources</i>, beginning on page 4-128, also discloses the relation of the proposed action to the cultural resource attributes of the South Mountains.</p> <p>City of Phoenix planning efforts since the mid-1980s illustrate an awareness of the potential for the proposed freeway to affect Phoenix South Mountain Park/ Preserve. In 1989, the South Mountain Park Master Plan was adopted by the Phoenix City Council. The master plan shows the freeway alignment as adopted by the State Transportation Board in 1988. In 1990, the South Mountain Preserve Act was ratified by the Arizona Legislature. The Act did not apply to roadways through a designated mountain preserve if the roadway was in the State Highway System prior to August 15, 1990. The proposed freeway was in the State Highway System prior to 1990. Records prior to the Act suggest a primary reason for the exception was to allow the proposed freeway to go through Phoenix South Mountain Park/ Preserve (see page 5-14 of the Draft Environmental Impact Statement). The project team examined alternatives to avoid the park, but did not identify any feasible and prudent alternatives to avoid impacts. The Arizona Department of Transportation continues to work with park stakeholders to minimize impacts and address concerns. Measures to minimize harm to the park were developed (see Draft Environmental Impact Statement, starting on page 5-23).</p>
513	Alternatives	<p>The comment suggests the environmental impact statement process was biased by a history of property acquisitions within the Study Area. More specifically, properties falling within the limits of the Preferred Alternative, as identified in the Final Environmental Impact Statement, were targeted for acquisition.</p> <p>As noted in text on page 3-54 of the Final Environmental Impact Statement, the Arizona Department of Transportation began acquiring land for the original alignment in 1988. Between 1988 and 2001, the Arizona Department of Transportation acquired approximately 293 acres. Most of this land (258 acres) is located in the Eastern Section along Pecos Road. In 2006, the Arizona Department of Transportation began protective and hardship land acquisition in the alignment right-of-way footprint for the W59 and E1 Alternatives. Between 2006 and October 2013, the Arizona Department of Transportation purchased 326 acres (303 in the Western Section and 23 in the Eastern Section). The process for hardship and advanced acquisitions is explained in text on page 4-50 of the Final Environmental Impact Statement.</p>

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	<p>PMPC; May 21, 2013</p> <p style="text-align: center;">Phoenix Mountains Preservation Council Official position on the Arizona Department of Transportation's South Mountain Freeway Draft Environmental Impact Study</p> <hr/> <p>PMPC is an organization put into place by Arizona visionaries, and for the last 40 years PMPC has continued to monitor and anticipate the impact that rapid population growth would have on our precious Mountain Preserve system.</p> <p>PMPC is steadfastly opposed to any alignment of the Loop 202 South Mountain Freeway that allows for trespass onto the Mountain Preserve or for any excavation into the South Mountain what so ever. These mountain preserves ensures a lifestyle that 80% of Arizona voters consistently support. The mountain preserves are unique and are for people and wildlife, not for vehicle trespass. PMPC does not agree with many of the DEIS assumptions finding them objectionable and deficient in the following analysis areas.</p> <p><u>Unacceptable Pre-Decisional Actions:</u> ADOT has made some pre-decisional actions with the purchase of property before the Draft Environmental Impact Statement (DEIS) was released. Phoenix Mountains Preservation Council (PMPC) questions the legality of this action and the entire DEIS when it appears ADOT has already made considerable financial investment to establish the alignment for the South Mountain Freeway rather than follow the prescribed process.</p> <p>514 <u>Dismal Wildlife Connectivity:</u> The DEIS does not meet the minimal requirements for coordination and analysis of wildlife resources. The Arizona Game and Fish Department was consulted in 2009 during scoping. The current connection to the Estrella Mountains allows for passage of mule deer, javelina, bobcat, and mountain lion. There is no evidence of further efforts to ascertain wildlife connectivity needs or possible mitigation. The Sonoran desert tortoise provides additional evidence of inadequate cumulative analysis given its status as a U.S. Fish & Wildlife Service's candidate species. The mountain ridge area slated for demolition meets the definition for the tortoise's habitat.</p> <p>515 <u>Unreasonable Taking of Mountain Preservation Lands:</u> The DEIS states in Figure 5-7 Public Parkland the avoidance of taking over 30 acres of the Preserve is "not prudent and feasible". The taking of this mountainside will destroy important archeological, spiritual, cultural and recreational sites with no realistic or reasonable mitigation possible in the study. The study failed to recognize and address new two trails, Gila and Bursera Trails, created in the southwest end of the Preserve in 2010.</p> <p><u>Outdated Data Projections Used:</u> The DEIS is based on outdated data projections that are now six to eight years old. The analysis does not acknowledge the impact the major economic downturn had and it brings into question the validity of projected growth levels put forth in the DEIS. In all the alternative studies, the DEIS does not provide one alternative analysis to the demolition of the southwest ridges of South Mountain. Furthermore, nowhere in this study is there an assessment of hazardous material truck traffic nor any mention of managing this truck traffic and the consequences of a serious hazard waste incident.</p> <p>Over 3 million visitors come to South Mountain Park/Preserve annually, according to City of Phoenix statistics. Destroying any part of the mountain to align a high-capacity freeway will only have a negative impact on tourism and the many unique resources the park offers.</p> <p>We urge ADOT to stop providing studies that do not accurately or thoroughly address the impact this freeway has on South Mountain. It's time to stop the \$20 million and more in wasted tax payer's money to study the environmental impact and design for an alignment that no longer makes sense.</p>

Code	Issue	Response
513 (cont.)		The comment infers that by taking such action, the objective equal consideration of the alternatives studied in detail in the Draft and Final Environmental Impact Statements is tainted. Advanced acquisitions in parallel to a National Environmental Policy Act environmental determination process is not unprecedented and is common practice. In this case, property acquisitions by the Arizona Department of Transportation for purposes of implementing the proposed action are done at risk as communicated to the agency by the Federal Highway Administration. If another action alternative were to be ultimately selected, the agency would likely have to place the acquired properties on the market for sale and purchase. The Arizona Department of Transportation attempts to balance the risk against its mission of timely delivery of transportation infrastructure to the driving public. Further, Federal Highway Administration regulations do not allow the ownership of right-of-way to be a factor in the decision regarding the selection of an alternative.
514	Biology, Plants, and Wildlife	<p>The section, <i>General Impacts on Vegetation, Wildlife, and Wildlife Habitat</i>, beginning on page 4-125 of the Draft Environmental Impact Statement, discloses by what means the proposed action and its alternatives would affect vegetation, wildlife, and wildlife habitat. A Biological Evaluation was submitted to the U.S. Fish and Wildlife Service, Arizona Game and Fish Department, and Gila River Indian Community Department of Environmental Quality that addressed threatened, endangered, and candidate species, including the Sonoran desert tortoise. The information used to prepare the analysis in the Draft Environmental Impact Statement (page 4-122) was based on 2011 information retrieved from the Arizona Game and Fish Department (Gopherus agassizii, draft unpublished abstract compiled and edited by the Heritage Data Management System, Phoenix). Current information on threats and connectivity strategies was included in the Biological Evaluation. The U.S. Fish and Wildlife Service concurred with the species determinations in the Biological Evaluation (see Appendix 1-1 of the Final Environmental Impact Statement).</p> <p>Connectivity is planned to allow wildlife movement beneath the freeway in multiuse crossings (see page 4-137 of the Final Environmental Impact Statement). The Federal Highway Administration and Arizona Department of Transportation have committed to providing mitigation by including multifunctional crossing structures designed for wildlife and for limited human use as well as culverts designed for connectivity for smaller species. Wildlife-friendly design information would be considered during the design of drainage and crossing structures for the freeway (see <i>Mitigation</i>, beginning on page 4-138 of the Final Environmental Impact Statement).</p>
515	Section 4(f) and Section 6(f)	The cultural and religious importance of the South Mountains is acknowledged in the Draft Environmental Impact Statement in several locations, notably pages 4-132 and 5-26. The proposed project would accommodate and preserve (to the fullest extent possible from the available alternatives) access to the South Mountains for religious practices. Section 106 of the National Historic Preservation Act requires a government-to-government relationship between the Federal Government and Indian tribes as described beginning on page 4-140 of the Final Environmental Impact Statement. Section 106 requires that federal agencies take into account the effects of their undertakings on historic properties. This process requires consultation with tribal authorities as noted in the beginning of this response. Consultation has occurred

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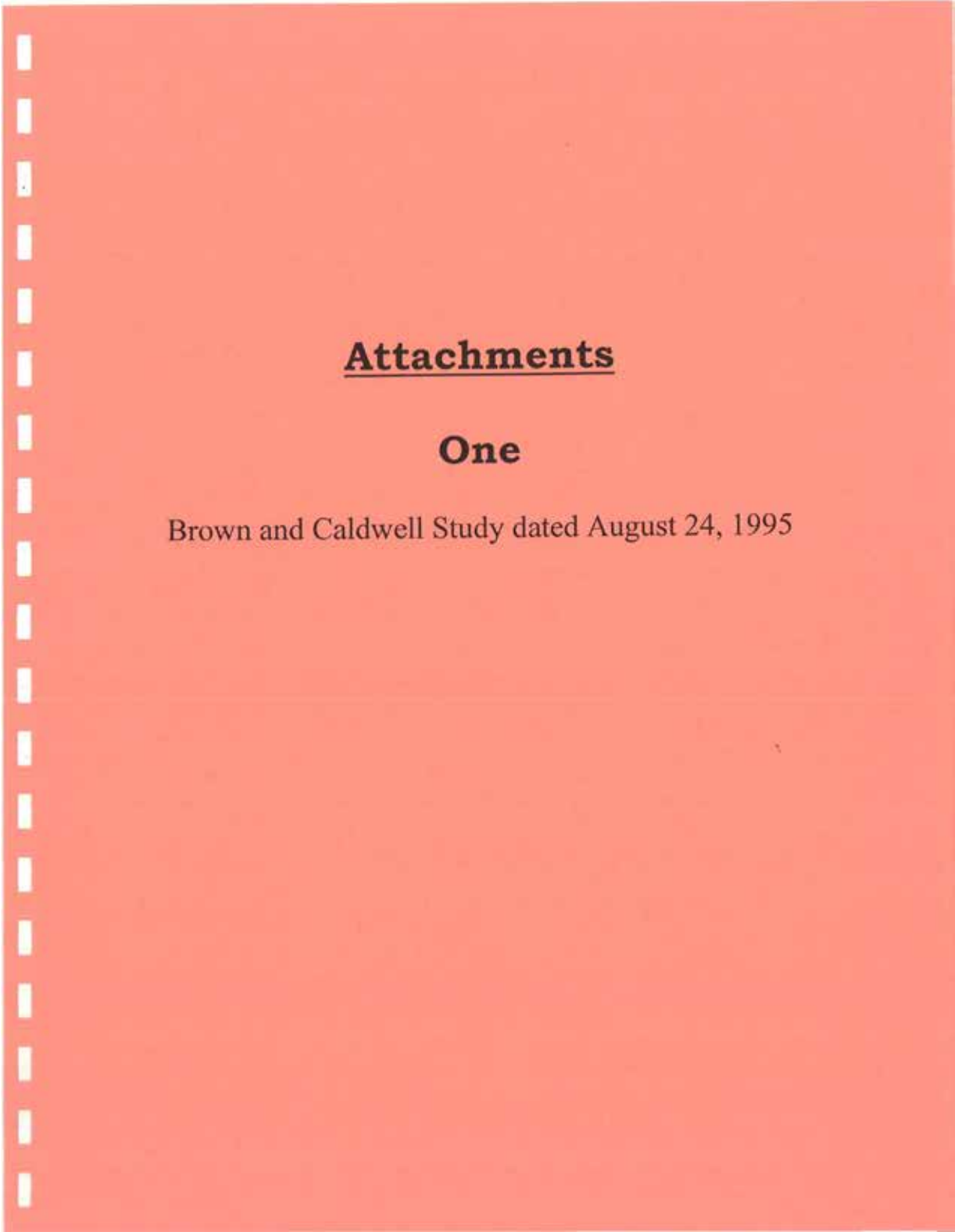
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516	<p>PMPC: May 21, 2013</p> <p style="text-align: center;">Phoenix Mountains Preservation Council Official position on the Arizona Department of Transportation's South Mountain Freeway Draft Environmental Impact Study</p> <hr/> <p>PMPC is an organization put into place by Arizona visionaries, and for the last 40 years PMPC has continued to monitor and anticipate the impact that rapid population growth would have on our precious Mountain Preserve system.</p> <p>PMPC is steadfastly opposed to any alignment of the Loop 202 South Mountain Freeway that allows for trespass onto the Mountain Preserve or for any excavation into the South Mountain what so ever. These mountain preserves ensures a lifestyle that 80% of Arizona voters consistently support. The mountain preserves are unique and are for people and wildlife, not for vehicle trespass. PMPC does not agree with many of the DEIS assumptions finding them objectionable and deficient in the following analysis areas.</p> <p><u>Unacceptable Pre-Decisional Actions:</u> ADOT has made some pre-decisional actions with the purchase of property before the Draft Environmental Impact Statement (DEIS) was released. Phoenix Mountains Preservation Council (PMPC) questions the legality of this action and the entire DEIS when it appears ADOT has already made considerable financial investment to establish the alignment for the South Mountain Freeway rather than follow the prescribed process.</p> <p><u>Dismal Wildlife Connectivity:</u> The DEIS does not meet the minimal requirements for coordination and analysis of wildlife resources. The Arizona Game and Fish Department was consulted in 2009 during scoping. The current connection to the Estrella Mountains allows for passage of mule deer, javelina, bobcat, and mountain lion. There is no evidence of further efforts to ascertain wildlife connectivity needs or possible mitigation. The Sonoran desert tortoise provides additional evidence of inadequate cumulative analysis given its status as a U.S. Fish & Wildlife Service's candidate species. The mountain ridge area slated for demolition meets the definition for the tortoise's habitat.</p> <p><u>Unreasonable Taking of Mountain Preservation Lands:</u> The DEIS states in Figure 5-7 Public Parkland the avoidance of taking over 30 acres of the Preserve is "not prudent and feasible". The taking of this mountainside will destroy important archeological, spiritual, cultural and recreational sites with no realistic or reasonable mitigation possible in the study. The study failed to recognize and address new two trails, Gila and Bursera Trails, created in the southwest end of the Preserve in 2010.</p> <p><u>Outdated Data Projections Used:</u> The DEIS is based on outdated data projections that are now six to eight years old. The analysis does not acknowledge the impact the major economic downturn had and it brings into question the validity of projected growth levels put forth in the DEIS. In all the alternative studies, the DEIS does not provide one alternative analysis to the demolition of the southwest ridges of South Mountain. Furthermore, nowhere in this study is there an assessment of hazardous material truck traffic nor any mention of managing this truck traffic and the consequences of a serious hazard waste incident.</p> <p>Over 3 million visitors come to South Mountain Park/Preserve annually, according to City of Phoenix statistics. Destroying any part of the mountain to align a high-capacity freeway will only have a negative impact on tourism and the many unique resources the park offers.</p> <p>We urge ADOT to stop providing studies that do not accurately or thoroughly address the impact this freeway has on South Mountain. It's time to stop the \$20 million and more in wasted tax payer's money to study the environmental impact and design for an alignment that no longer makes sense.</p>

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515 (cont.)		<p>with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. The consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Register of Historic Places eligibility recommendations (including traditional cultural properties), project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed.</p> <p>Mitigation measures were suggested in a letter from the Lieutenant Governor of the Gila River Indian Community to the Administrator, Arizona Division, Federal Highway Administration, dated June 23, 2010 (see page A372 of Appendix 2-1 of the Final Environmental Impact Statement). In this letter, the Gila River Indian Community submitted a proposal to address partial measures for the mitigation of adverse effect from the Pecos Road Alignment of the South Mountain Freeway. The Gila River Indian Community's proposal found the engineering solutions acceptable, but stated that implementation and construction of the proposed freeway would require further consultation. In committing to the evaluation of the South Mountains Traditional Cultural Property, the Arizona Department of Transportation and Federal Highway Administration also committed to the Gila River Indian Community's participation in ongoing engineering design refinements and acknowledged the importance of all plants and animals in the traditional culture of the Akimel O'odham and Pee Posh of the Gila River Indian Community.</p> <p>The newest South Mountains trails, the Bursera and the Pyramid, are more than ¼ mile from the proposed freeway and are analyzed in the Final Environmental Impact Statement on page 5-9. The trails are within ¼ mile of the planned Chandler extension and residential development; however, these trails do not have noise-sensitive activities or viewshed characteristics that contribute to their importance as a Section 4(f) recreational resource.</p> <p>Use of the mountains for the purposes of the proposed freeway represents two-tenths of one percent of the total mountain range. Since 1988, and as part of this environmental impact statement process, several measures have been undertaken and will be undertaken to further reduce effects on the mountains. These measures, including narrowing the design footprint, acquiring replacement land immediately adjacent to the mountains, and the provision of highway crossings, are outlined in text beginning on page 5-23 of the Draft Environmental Impact Statement.</p>
516	Purpose and Need	<p>The analyses in the Draft Environmental Impact Statement used socioeconomic and traffic projections at the regional analysis zone and traffic analysis zone levels. At the time of publication of the Draft Environmental Impact Statement, Census 2010-based socioeconomic data at the regional analysis zone and traffic analysis zone levels had not been adopted by the Maricopa Association of Governments and were not available to the project team. Therefore, the data used in the Draft Environmental Impact Statement were the most appropriate information available.</p> <p>The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11.</p>

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Code	Issue	Response
516 (cont.)		<p>While new projections based on the 2010 Census showed a lower anticipated population in 2035 than the previous projections, the need for the freeway has not changed. The traffic analysis demonstrated that the proposed project is needed today. If the proposed action is the Selected Alternative in the record of decision, planning for emergency situations would be initiated. If the plan is amended, it is made available to the Arizona Department of Transportation.</p> <p>A number of alternatives that avoided the South Mountains were considered during the study (see text beginning on page 5-1 of the Draft Environmental Impact Statement). These avoidance alternatives were determined to not be prudent and were eliminated from further consideration. To support this response, here is the comment from the U.S. Department of Interior on the Draft Environmental Impact Statement: "Following our review of the Section 4(f) Evaluation, we concur that there is no feasible or prudent alternative to the Preferred Alternative selected in the document, and that all measures have been taken to minimize harm to these resources." The complete letter can be found in Appendix 7, Volume III, on page B4.</p>
517	Section 4(f) and Section 6(f)	<p>The information regarding the context and attributes of the South Mountains is described in the Draft Environmental Impact Statement. The acreage of parkland to be converted to a transportation use is reported on page 5-14 in the section, <i>Direct Use</i>. It is reported that 31.3 acres or just less than 0.2 percent of the parkland would be converted (this is a reduction in the amount of use planned for in 1988). The text goes on to point out other concerns associated with the direct use reported, and text on page 5-14 in the sidebar, "<i>The South Mountains in Phoenix's Sonoran Preserve System</i>," describes the importance of Phoenix South Mountain Park/Preserve in the region. Beginning on page 5-23 in the section, <i>Measures to Minimize Harm</i>, measures are presented to be undertaken to address the use impacts, including land replacement, on properties adjacent to the park. The section, <i>Cultural Resources</i>, beginning on page 4-128, also discloses the relation of the proposed action to the cultural resource attributes of the South Mountains.</p> <p>City of Phoenix planning efforts since the mid-1980s illustrate an awareness of the potential for the proposed freeway to affect Phoenix South Mountain Park/Preserve. In 1989, the South Mountain Park Master Plan was adopted by the Phoenix City Council. The master plan shows the freeway alignment as adopted by the State Transportation Board in 1988. In 1990, the South Mountain Preserve Act was ratified by the Arizona Legislature. The Act did not apply to roadways through a designated mountain preserve if the roadway was in the State Highway System prior to August 15, 1990. The proposed freeway was in the State Highway System prior to 1990. Records prior to the Act suggest a primary reason for the exception was to allow the proposed freeway to go through Phoenix South Mountain Park/Preserve (see Draft Environmental Impact Statement page 5-14). The project team examined alternatives to avoid the park, but did not identify any feasible and prudent alternatives to avoid impacts. The Arizona Department of Transportation continues to work with park stakeholders to minimize impacts and address concerns. Measures to minimize harm to the park were developed (see Draft Environmental Impact Statement, starting on page 5-23). The activities that make the park such a highly valued tourist attraction (recreational activities, interaction with the Sonoran Desert) would remain.</p>

Code	Comment Document
	<div>The image shows a document cover with a light orange background. On the left side, there is a vertical strip of white with a dashed line, resembling a binder edge. In the center, the word "Attachments" is written in a bold, black, serif font and is underlined. Below it, the word "One" is written in a bold, black, serif font. At the bottom, the text "Brown and Caldwell Study dated August 24, 1995" is written in a black, serif font.</div>

Code	Issue	Response

Code

Comment Document

M. Glatfelter

518

BROWN AND
CALDWELL

August 24, 1995

Mr. Tighue Shields, Director
Golf Course Maintenance Operations
Cobblestone Golf Group
2201 East Clubhouse Drive
Phoenix, Arizona 85048

15/2906-01

Subject: Well Feasibility/Well Siting Investigation
Foothills Golf Club, Phoenix, Arizona

Dear Mr. Shields:

Brown and Caldwell is pleased to provide Cobblestone Golf Group with this hydrogeologic study addressing the feasibility and preferable locations for a water supply well. This investigation was conducted in accordance with our agreement of August 7, 1995. Brown and Caldwell was authorized by Cobblestone Golf Group to conduct the tasks listed in the August 7, 1995 Agreement, including 1) preliminary data collection, and 2) well siting investigation.

519

BACKGROUND

The Foothills Golf Club is currently serviced by an existing well, which is supplemented during the summer months by City of Phoenix fire hydrant water. Use of City of Phoenix water for turf irrigation at the Foothills Golf Club is very expensive and, in addition, the existing well is located in the right-of-way for the proposed expansion of Pecos Road, and will need to be abandoned in the future. Therefore, a new water source is needed immediately to supplement the existing well, and to provide a future water supply for the Foothills Golf Club as a sole source.

520

BASIC DATA

The available hydrogeologic literature relating to the Foothills Golf Club area is limited. Available data were collected from the Arizona Department of Water Resources (ADWR), Cobblestone Golf Group files, and the files of Gilbert Pump Company (the pump maintenance contractor for the Foothills Golf Course well).

Environmental Engineering And Consulting • Analytical Services
cbstone\2906\letter.rpt1082495.rhb
3633 N. CENTRAL AVENUE, SUITE 300, PHOENIX, AZ 85012-1931
(602) 222-4444 FAX (602) 222-4466


Code	Issue	Response
518		Comment noted.
519	Water Resources	<p>Wastewater effluent is not available as a replacement source as noted on page 4-100 of the Draft Environmental Impact Statement; therefore, only two water sources are available for irrigation and lake supply for the Foothills Community Association. The well that would be acquired and potable water from the City of Phoenix. The discussion on page 4-100 of the Draft Environmental Impact Statement has been modified in the Final Environmental Impact Statement to reflect that reclaimed wastewater would not be available; however, the conclusion on page 4-100 is still appropriate. As stated on page 4-100 of the Draft Environmental Impact Statement, "In the event that well replacement were to be impossible, the Arizona Department of Transportation would still replace the water that would be lost through the acquisition."</p> <p>Page 4-100 of the Draft Environmental Impact Statement states that finding a suitable location for a new well in this area may be difficult. Productivity of the well in bedrock formations is primarily based on intercepting fractures, and that can be very difficult to do. The Arizona Department of Transportation is aware of the difficult conditions that exist in replacing wells in this area.</p> <p>The procedure identified on page 4-100 of the Draft Environmental Impact Statement, define the procedure that the Arizona Department of Transportation would use to replace affected wells, and also identifies the general costs that the Arizona Department of Transportation would incur to replace the lost water sources.</p> <p>Depending on whether an action alternative were the Selected Alternative, it may be possible to keep the well in its current location, but move the well controls and associated piping to outside of the right-of-way. Such an analysis would be performed later in the design process.</p>
520		Hydrogeologic report reviewed.

Code	Comment Document
	<div>Mr. Tighue Shields August 24, 1995 Page 2</div> <div>HYDROGEOLOGIC ANALYSIS</div> <div>The hydrogeologic analysis of the Foothills Golf Club area includes a geologic evaluation, based on review of available literature, and limited geologic mapping by a Brown and Caldwell geologist. The hydrogeologic analysis of the study area also included an evaluation of the groundwater conditions in the study area, based on hydrologic information from ADWR files and regional published reports. Generally, the available data relating to the geology of the Foothills Golf Club area were moderate, but the data relating to the hydrology and groundwater conditions of the Foothills area were quite sparse.</div> <div>Geologic Setting</div> <div>The study area is located along the southern flanks of South Mountain, which is a southwest trending mountain range that was formed during the Middle Tertiary Period (20 to 25 million years before present) as a result of low angle normal faulting. The rock types that make up South Mountain, and also occur within the study area include: <i>Precambrian amphibolite gneiss</i>, which is a fine-grained, dark green rock that is present along the western flank of South Mountain; <i>Tertiary granite and granodiorite</i>, which is a fine-grained, pink-to-cream-colored rock that comprises the remaining portion of the range; and <i>dikes</i>, which are veins of rock that result from intrusion of molten rock into older pre-existing rocks. Dikes in South Mountain have various composition, and they cross-cut the Precambrian and Tertiary rocks.</div> <div>Hydrologic Setting</div> <div>The data collected from ADWR were insufficient for the preparation of a groundwater elevation contour map. However, available driller's logs for nearby wells were used to construct a generalized geologic cross-section of the area (Figure 1). A video survey obtained from Gilbert Pump Company was used to determine the static water level in the Foothills Golf Club well (Figure 1). Groundwater flow through bedrock aquifers occurs along fractures (broken or cleaved zones in the rock, along which movement has occurred) and joints (closely spaced penetrative cracks in the rock that do not show evidence of movement). The overlying alluvium in this area is relatively thin, and does not appear to significantly contribute water to wells in the Foothills Golf Club area. Therefore, the alluvium was not targeted as a major groundwater resource in this investigation. Rather, the fractured bedrock material within the study area was evaluated to identify preferable locations for installation of a new water well(s) for the facility.</div> <div>cblstone\2906\letter.rpt\082495\ubb</div>

Code	Issue	Response

Code	Comment Document
	<p>Mr. Tighue Shields August 24, 1995 Page 3</p> <p>FRACTURE TRACE ANALYSIS</p> <p>The most favorable well location in a fractured bedrock aquifer is generally along major fracture systems, or at the intersection of two or more fractures. Groundwater preferentially flows along the fracture systems and thus, a greater volume of groundwater is typically produced from wells along these geologic structures. In order to characterize the fractured bedrock in the Foothills Golf Club area, Brown and Caldwell conducted a fracture trace analysis, utilizing photogeology and field mapping, to determine the orientation (strike and dip) and overall character of the fractures.</p> <p>Aerial photographs of the Foothills Golf Club area were obtained and evaluated by Brown and Caldwell hydrogeologists to identify the principal geologic lineaments in the study area. Geologic lineaments include such linear features as unusually straight drainages, vegetation alignments, and alignment of discolored or weathered surfaces along outcrops. Lineaments such as these typically occur as a result of underlying geologic structures that control the weathering, vegetation, and outcrop patterns observed at the land surface. The principal geologic lineaments in the study area are presented in Figure 2. Two primary lineament orientations were identified. The dominant (primary) lineament orientation trends to the west-southwest, and the minor (secondary) lineament orientation is nearly perpendicular to the primary lineaments, trending to the southeast. The primary lineaments are more clearly defined on the aerial photographs, and are probably associated with the tectonic event that originally formed South Mountain during the Middle Tertiary Period.</p> <p>The photogeologic analysis was augmented with limited geologic mapping, and field measurement of selected fracture and joint orientations in the area. The field measurement of geologic structure orientations involves the use of a Brunton compass (a specially designed compass used for measurement of geologic formations and structures) to determine the strike (horizontal direction) and dip (vertical orientation) of dikes, fractures, and joints in the area. The joint, fracture, and dike orientations are presented in Figure 2, and are also listed in Table 1. Joints that occur in the study area frequently occur in sets of two or three intersecting joint planes (Figure 2, Table 1). The orientation of the joint planes parallels the orientation of the primary and secondary lineaments determined in the photogeologic study, and provides confirmation of Brown and Caldwell's photogeologic interpretation of the Foothills Golf Club area.</p> <p>FINDINGS AND RECOMMENDATIONS</p> <p>Based on our fracture trace analysis, Brown and Caldwell has identified three locations that appear favorable for the installation of a water well. Each of these locations is at the intersection of at least two fracture systems, as indicated in Figure 2. A more detailed map showing the location of the proposed well sites is presented in Figure 3. The three proposed well locations have been prioritized from the most favorable (indicated as "1" in Figures 2 and 3) to least favorable</p> <p>cb1stone\2906\letter.rpt\082495vrb</p>

Code	Issue	Response

Code	Comment Document
	<p>Mr. Tighue Shields August 24, 1995 Page 4</p> <p>(indicated as "3" in Figures 2 and 3). The prioritization is primarily based on the hydrogeologic setting, but also considers the location of the existing water distribution system.</p> <p>An additional option would be the installation of a replacement well near the existing well site. The proposed location of a replacement well is designated as "R" in Figures 2 and 3. The Rules and Regulations of the ADWR stipulate that an additional well spacing/well impact analysis is required <u>only</u> if the replacement well is located more than 660 feet from the existing well. Therefore, if a replacement well is to be drilled, it should be located within 660 feet of the existing well, but beyond the right-of-way for the Pecos Road expansion.</p> <p>Brown and Caldwell appreciates the opportunity to provide this well feasibility/well siting report to the Cobblestone Golf Group. If you have any questions regarding this report, or require additional information, please do not hesitate to call.</p> <p>Very truly yours,</p> <p>BROWN AND CALDWELL</p> <div></div> <p>Marvin F. Glotfelty, R.G. Groundwater Resources Manager</p> <p>MFG:rbb Attachments (4)</p> <p>cc: Mr. Brett Marsh, Brown and Caldwell Mr. Raymond Roessel, Brown and Caldwell</p> <p><small>cblstone\2906\letter.rpt\082495\rb</small></p>

Code	Issue	Response

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Comment Document

Table 1. Orientation of Dikes, Joints, and Fractures Foothills Golf Club Area, Phoenix Arizona

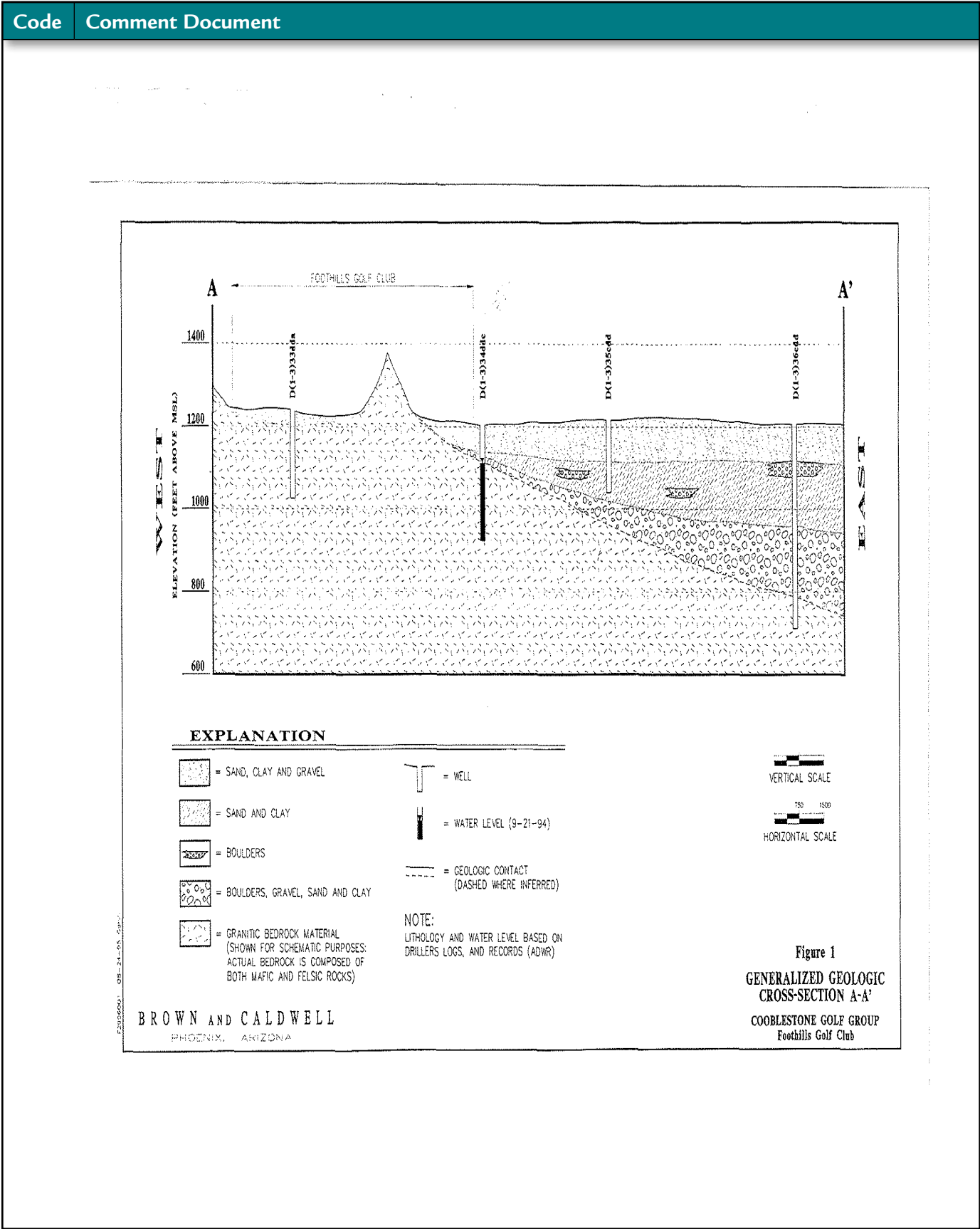
Station Number	Approximate Location	Orientation	Type of Feature
1	D(1-3)34dcd	N50E° 39SE°	Dike
2	D(1-3)34cdd	N25W° 44E°	Fracture
		N80E° 30S°	Joints
		N60W° 71N°	
3	D(1-3)28cdb	N27W° 44E°	Fracture
		N34E° 58E°	Joints
4	D(1-3)28dcb	N55W° 39S°	Joints
5	D(1-3)34aac	N10W° 73E°	Joints
		N82E° 71S°	
		N5E° 62S°	Intersection of joints
6	D(1-3)34aaa	N48E° 45S°	Joints
		N5E° 75W°	
		N77W° 29N°	
		N70E° 25E°	Intersection of joints
7	D(1-3)34daa	N48W° 71W°	Dike
8	D(1-3)34dcc	N87W° 42N°	Fracture
		N52W° 39S°	
		N50E° 82E°	Joints
		N26W° 84W°	
		N12E° 81S°	Intersection of joints
9	D(1-3)35cbb	N78W° 8N°	
		N80E° Vertical	Joints
		N28W° 86W°	
		N62W° 87N°	Intersection of joints
10	D(1-3)35cba	N6W° 66W°	
		N86E° 15N°	Joints
		N71E° 75S°	

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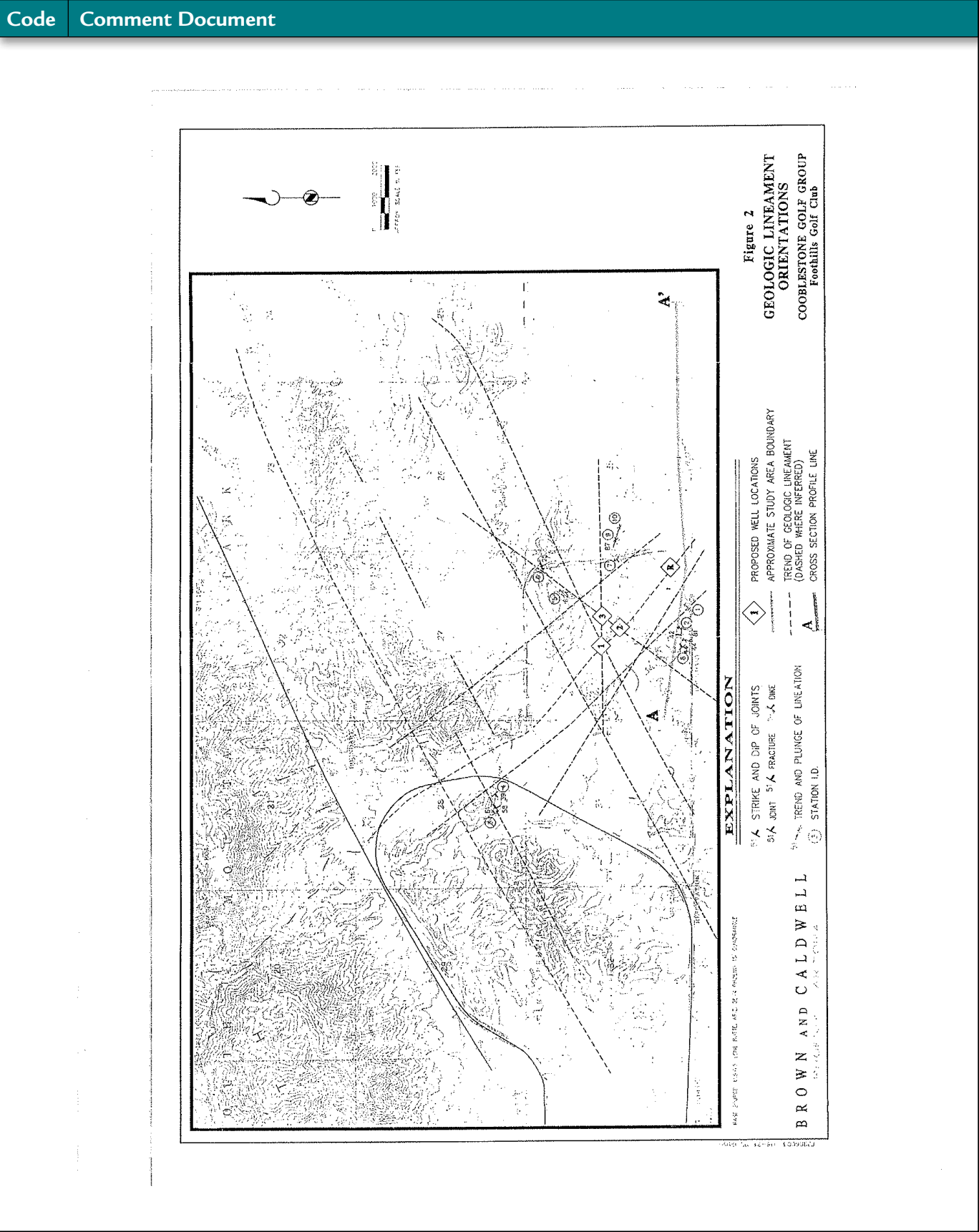
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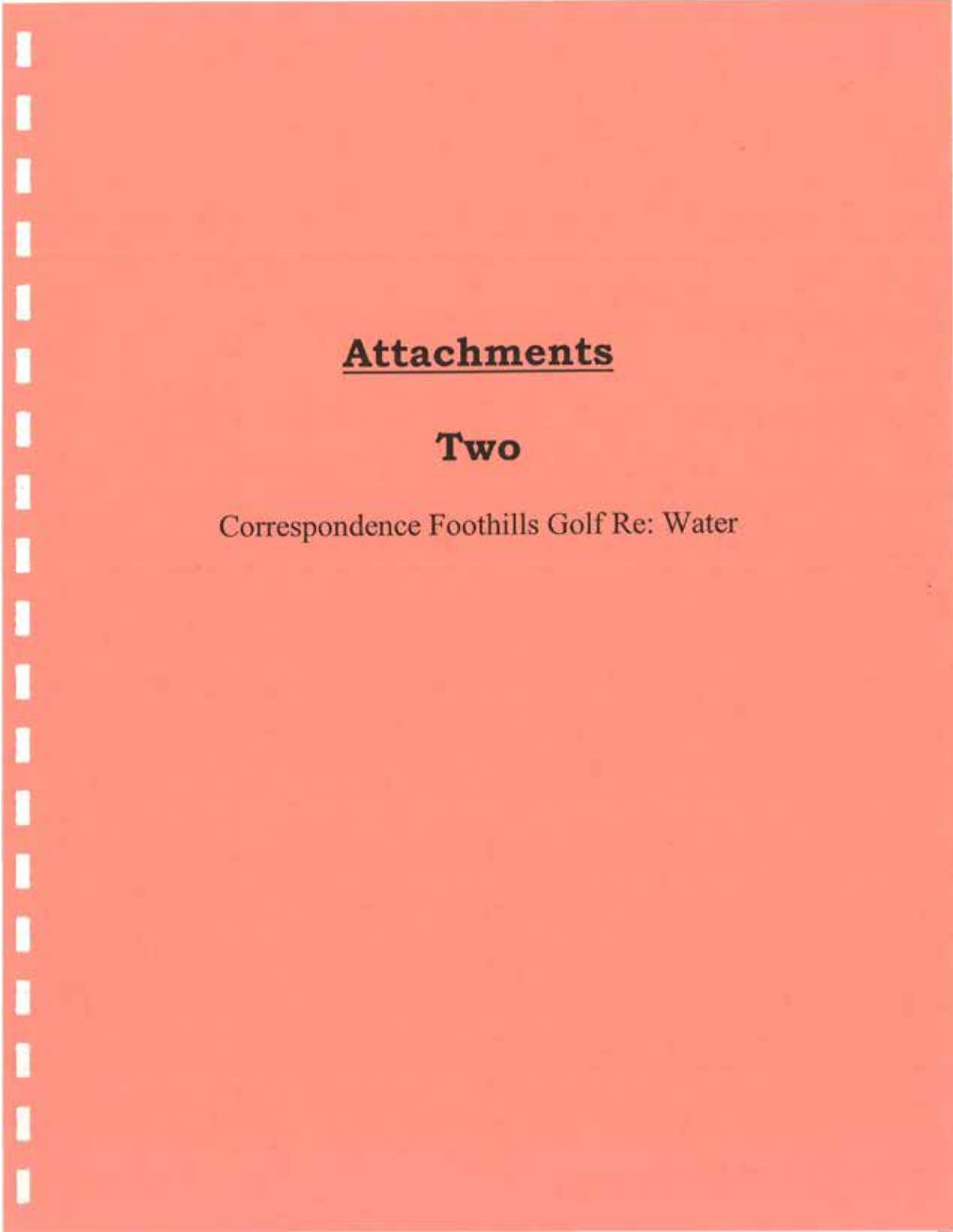
Response



Code	Issue	Response



Code	Issue	Response

Code	Comment Document
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Code	Issue	Response

Code	Comment Document
	<p>RE: Re:</p> <p>Subject: RE: Re: From: Terry <gm@Ahwatukeegc.com> Date: 6/3/2013 10:03 AM To: Chad Blostone <chadblostone@cox.net></p> <p>Chad,</p> <p>We have not and do not plan on doing any test drilling. Suncor did several test drills when they owned it and found nothing.</p> <p>Terry Duggan President Foothills Golf Group Foothills Golf Club Ahwatukee Country Club Club West Golf Club The Lakes Golf Club The Duke Golf Club (O) 480-893-9772 (C) 480-862-2947 (F) 480-699-4490</p> <p>-----Original Message----- From: Chad Blostone [mailto:chadblostone@cox.net] Sent: Friday, May 31, 2013 4:00 PM To: Terry Subject: Re:</p> <p>marvin at clear creek is looking for the old report. will send it to me if he can find it. have you test drilled club west?</p> <p>On 5/30/2013 8:55 AM, Terry wrote: Chad,</p> <p>I am sure that the 55-630348 is the well next to our pump station on hole number 1. The motor was pulled and it is no longer producing any water. It was not good from the inception as it only produced enough water for a drinking fountain.</p> <p>The main well at Pecos is pulling from 600 to 700 gallons a minute.</p> <p>If we had to pay for city water the cost would be upwards of 1 million dollars annually which includes the water for the H.O.A. lakes. The Foothills Golf Club would no longer be a viable asset. We are barley breaking even at this point. The Golf Industry is not seeing any turn around yet. We can't close the course but we would probably be looking to sell it if we had to purchase straight city water.</p> <p>Hope this helps.</p> <p>Terry Duggan President Foothills Golf Group Foothills Golf Club Ahwatukee Country Club Club West Golf Club</p> <p>1 of 4</p> <p>6/13/2013 12:13 PM</p>

Code	Issue	Response
521	Water Resources	<p>Only two water sources are available for irrigation and lake supply for the Foothills Community Association. The well that would be acquired and potable water from the City of Phoenix. The discussion on page 4-100 of the Draft Environmental Impact Statement has been modified in the Final Environmental Impact Statement to reflect that reclaimed wastewater would not be available; however, the conclusion on page 4-100 is still appropriate. As stated on page 4-100 of the Draft Environmental Impact Statement, “In the event that well replacement were to be impossible, the Arizona Department of Transportation would still replace the water that would be lost through the acquisition.”</p> <p>Page 4-100 of the Draft Environmental Impact Statement states that finding a suitable location for a new well in this area may be difficult. Productivity of the well in bedrock formations is primarily based on intercepting fractures, and that can be very difficult to do. The Arizona Department of Transportation is aware of the difficult conditions that exist in replacing wells in this area.</p> <p>The procedure identified on page 4-100 of the Draft Environmental Impact Statement defines the procedure that the Arizona Department of Transportation would use to replace affected wells, and also identifies the general costs that the Arizona Department of Transportation would incur to replace the lost water sources.</p> <p>Depending on whether an action alternative were the Selected Alternative, it may be possible to keep the well in its current location, but move the well controls and associated piping to outside of the right-of-way. Such an analysis would be performed later in the design process.</p>

Code	Comment Document
	<div>RE: Re:</div> <div><div>The Lakes Golf Club The Duke Golf Club (O) 480-893-9772 (C) 480-862-2947 (F) 480-699-4490</div><div>-----Original Message----- From: chadblostone@cox.net [mailto:chadblostone@cox.net] Sent: Wednesday, May 29, 2013 6:59 PM To: Terry Subject: Re: Re: Do you know of another well the foothills owns in the area - 55 630348? Is it being used? If not, can it be used? How much water are you pulling from 55 630347 in gallons per day? I've asked this before but need to ask again - would the foothills gc be unprofitable if you were transitioned from well to city potable water? Could it lead to closure? Thx Sent on the Sprint(r) Now Network from my BlackBerry(r) -----Original Message----- From: Terry <gm@Ahwatukeegc.com> Date: Wed, 29 May 2013 16:48:07 To: chadblostone@cox.net<chadblostone@cox.net> Subject: RE: Re: Chad, Sounds good! I am sure that Clear Creek will be able to give you the most information regarding the area. Terry Duggan President Foothills Golf Group Foothills Golf Club Ahwatukee Country Club Club West Golf Club The Lakes Golf Club The Duke Golf Club (O) 480-893-9772 (C) 480-862-2947 (F) 480-699-4490</div><div>-----Original Message----- From: chadblostone@cox.net [mailto:chadblostone@cox.net] Sent: Wednesday, May 29, 2013 9:46 AM To: Terry Subject: Re: Re: I'm going to call clear creek and southwest water. I'll tell them I got their names from you. Anything they give the hoa that I will be forwarding to adot I'll send to u first. I don't want to get in the way of your objectives. Thx.</div></div> <div><div>2 of 4</div><div>6/13/2013 12:13 PM</div></div>

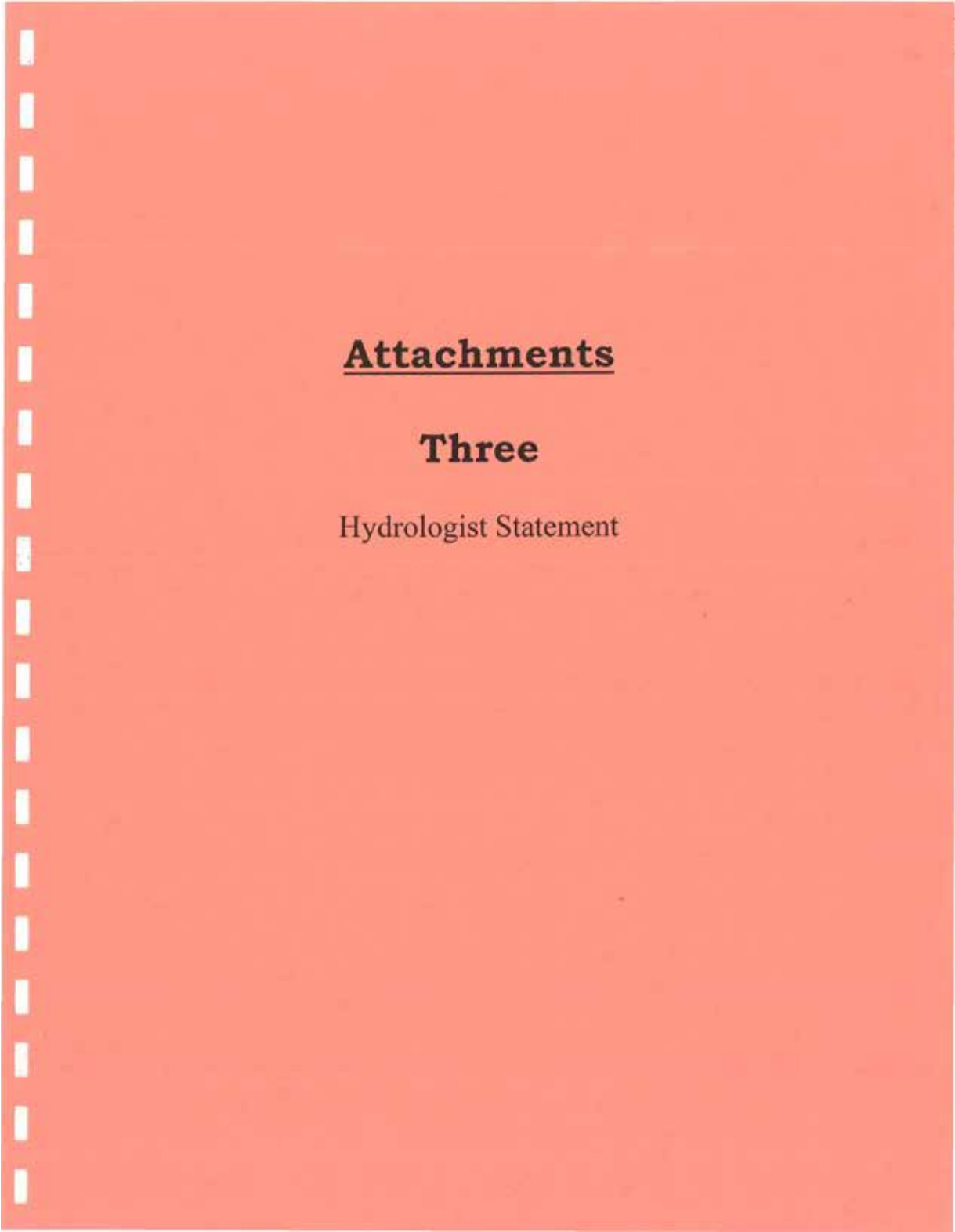
Code	Issue	Response

Code	Comment Document
	<div>RE: Re:</div> <div><div>Sent on the Sprint(r) Now Network from my BlackBerry(r)</div><div>-----Original Message----- From: Terry <gm@Ahwatukeegc.com> Date: Wed, 29 May 2013 15:49:06 To: chadblostone@cox.net<chadblostone@cox.net> Subject: RE: Re: Chad, I think we used Clear Creek & Associates for the geological study. Along with either Beaman Drilling or Webber to drill the wells. We are currently working with Southwest Water Works. Terry Duggan President Foothills Golf Group Foothills Golf Club Ahwatukee Country Club Club West Golf Club The Lakes Golf Club The Duke Golf Club (O) 480-893-9772 (C) 480-862-2947 (F) 480-699-4490 -----Original Message----- From: chadblostone@cox.net [mailto:chadblostone@cox.net] Sent: Wednesday, May 29, 2013 8:31 AM To: Terry Subject: Re: Do u have any idea who did the work? What type of contractor consults on this type of question? -----Original Message----- From: Terry Dugan. Golf course To: Chad Blostone Subject: RE: Sent: May 29, 2013 8:07 AM Chad, Unfortunately that was 3 companies ago that did the drilling. I do not have access to those records; however I think the ADWR tracks all wells and what they produce. >From my understanding of this area you would need to hit a fracture in order to get water. The current well that we have is in a fracture. Most everything north of Pecos and west of 40th Street is bedrock. The best and highest chance to get water in the sandy areas of the desert; which is everything south of Pecos Road. I don't think that the water table moves as it always seeks the lowest point. I hope this helps. Terry Duggan President Foothills Golf Group Foothills Golf Club</div></div> <div><div>3 of 4</div><div>6/13/2013 12:13 PM</div></div>

Code	Issue	Response

Code	Comment Document
	<div>RE: Re:</div> <div><div>Ahwatukee Country Club Club West Golf Club The Lakes Golf Club The Duke Golf Club (O) 480-893-9772 (C) 480-862-2947 (F) 480-699-4490</div><div>-----Original Message----- From: chadblostone@cox.net [mailto:chadblostone@cox.net] Sent: Tuesday, May 28, 2013 11:44 PM To: Terry Subject:</div><div>Terry - can u send me the reports that show the test drilling coming up dry? Adot says they "assume" they can replace the well. They need to know they can't just simply drill anywhere on the course to replace. They need to study replacement sites off the foothills prior to making a decision to take the on site well.</div><div>Any chance those areas test drilled 14 yrs ago could now have water? Does the underground water table move?</div><div>Thx.</div><div>Sent on the Sprint(r) Now Network from my BlackBerry(r)</div><div>Sent on the Sprint(r) Now Network from my BlackBerry(r)</div></div> <div><div>4 of 4</div><div>6/13/2013 12:13 PM</div></div>

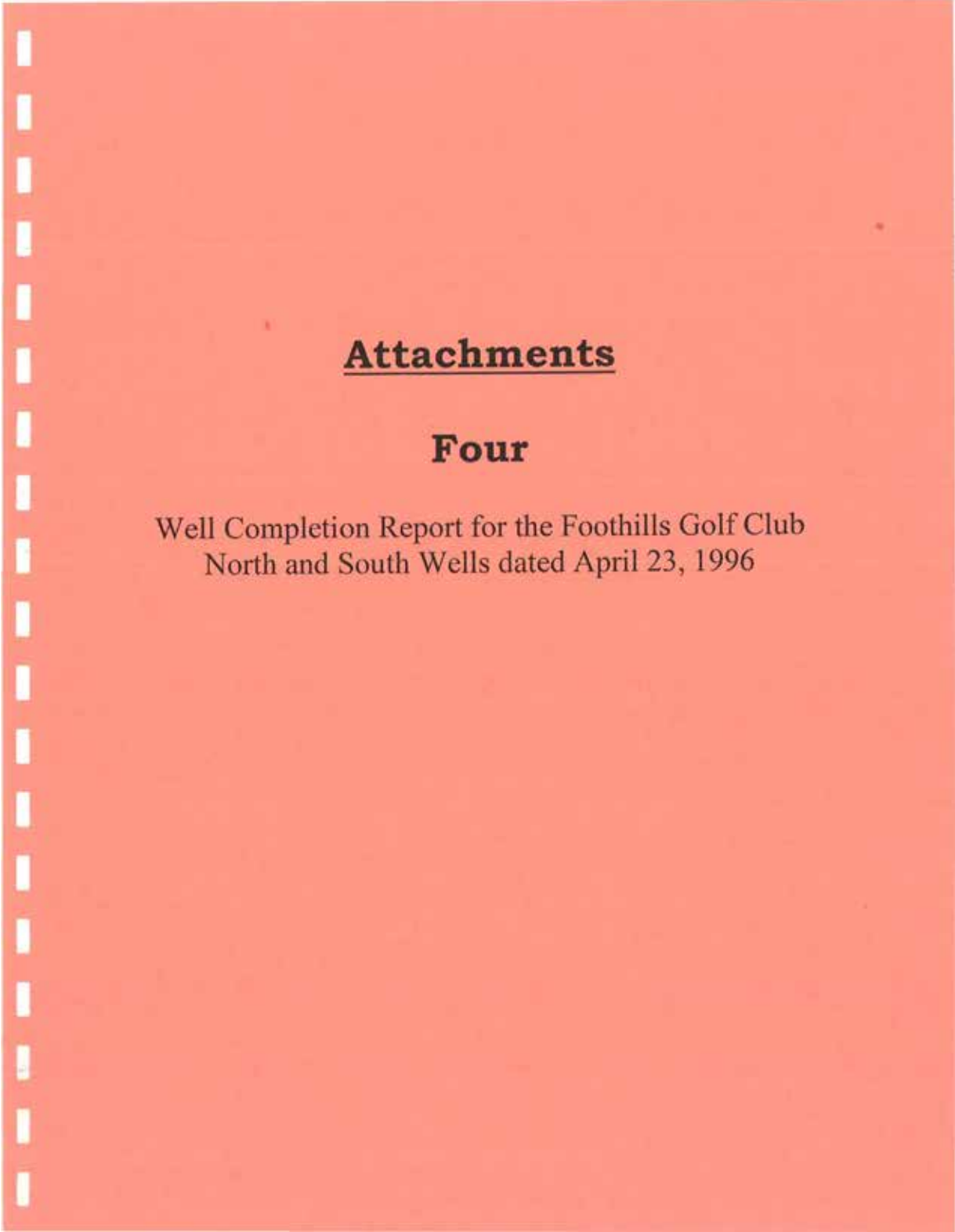
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Code	Issue	Response

Code	Comment Document
	<div>Foothills GC wells</div> <div><div>522</div><div><p>Subject: Foothills GC wells From: Marvin Glotfelty <MGlotfelty@clearcreekassociates.com> Date: 6/12/2013 3:22 PM To: "chadblostone@cox.net" <chadblostone@cox.net></p><p>Chad,</p><p>As you requested, copies of the well reports that were done for your group back in 1995 and 1996 are attached. In general, groundwater resources become very sparse and uncertain to the north of Pecos Road, due to the shallow bedrock. It would be technically possible to drill a directional (slanted) well near the Pecos Road alignment that dipped into the region of the alluvial basin to the south. However, I would <u>strongly recommend against that action</u> without first obtaining approval from the Gila River Indian Community to the south, and also the Arizona Department of Water Resources. Otherwise, you may encounter substantial legal challenges to the water rights associated with the directional well. I hope this helps to clarify the situation for you.</p><p>Best regards, <i>Marvin</i> Marvin F. Glotfelty, R.G. Principal Hydrogeologist Clear Creek Associates 6155 E. Indian School Road, Suite 200 Scottsdale, AZ 85251 office: (480) 659-7131 cell: (602) 809-2219 email: mglotfelty@clearcreekassociates.com This e-mail sent by 100% solar energy</p><div>Attachments:</div><div><div>Well Completion Report for the Foothills Golf Club North and South Wells.pdf1.5 MB</div><div>Well Feasibility Well Siting Investigation 08.24.95.pdf978 KB</div></div></div></div> <div><div>1 of 1</div><div>6/12/2013 8:24 PM</div></div>

Code	Issue	Response
522		Hydrogeologist statement reviewed.

Code	Comment Document
	<div>The image shows a document cover with a light orange background. On the left side, there is a vertical strip of white with a dashed line, resembling a binder edge. The word "Attachments" is centered in a bold, black, serif font and is underlined. Below it, the word "Four" is also centered in a bold, black, serif font. At the bottom, the text "Well Completion Report for the Foothills Golf Club" is centered, followed by "North and South Wells dated April 23, 1996" on the next line.</div>

Code	Issue	Response

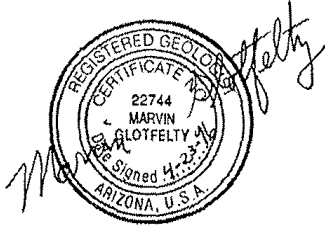
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523


**WELL COMPLETION REPORT FOR THE
FOOTHILLS GOLF CLUB
NORTH AND SOUTH WELLS**

April 23, 1996

Code	Issue	Response
523		Well completion report reviewed.

Code	Comment Document																								
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	<div><p>WELL COMPLETION REPORT FOR THE FOOTHILLS GOLF CLUB NORTH AND SOUTH WELLS</p><p>April 23, 1996</p><p>Prepared for:</p><p>Cobblestone Golf Group 2201 East Clubhouse Drive Phoenix, Arizona 85048</p><p>Prepared by:</p><p>Brown and Caldwell 3636 North Central Avenue Suite 300 Phoenix, Arizona 85012 (602) 222-4444</p></div>

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	<div><div>SECTION 2.0</div><div>DRILLING AND INSTALLATION OF THE NORTH WELL</div><div>2.1BOREHOLE DRILLING</div><div><p>The pilot borehole for the North Well was drilled by Arizona Beeman Drilling Company of Apache Junction, Arizona utilizing an air rotary drilling technique with drilling foam added to the fresh water drilling fluid. A Gardner-Denver 1500 rotary rig was used to perform all work associated with the drilling and installation of the well. Brown and Caldwell personnel performed field inspection and documentation of the key field operations. Drilling and well installation operations were performed during daylight hours only (7:00 a.m. to 6:00 p.m.), Monday through Friday. Sound blankets were used to prevent rig noise from being a nuisance to neighboring residences.</p><p>Drilling of the pilot hole commenced on February 6, 1996, and was completed on February 8, 1996. A 14 3/4-inch diameter borehole was drilled to 20 feet below land surface (bls). A temporary surface casing was set to 20 feet bls using 10 3/4-inch outside diameter low-carbon steel casing. After the temporary surface casing was sealed with bentonite chips, the pilot hole was drilled using a 9 7/8-inch button bit from 20 feet bls to a depth of 190 feet bls. In order to increase the drilling rate, an 8-inch downhole hammer bit was used from 190 feet bls to the total depth of 400 feet bls.</p><p>Drilled cuttings were collected at 10-foot intervals throughout the pilot borehole. The samples were preserved in 4-inch by 6-inch cloth sample bags for future reference. An additional set of the drilled cutting samples was placed in specially-designed "ice cube tray" plastic containers, and submitted to Cobblestone personnel for archival purposes.</p><div>2.2LITHOLOGIC LOG</div><div><p>A detailed lithologic log of the drilled cuttings from the North Well pilot hole is presented in Appendix A and is summarized below. From the land surface to 17 feet bls, the materials penetrated by the North Well are comprised of light brown felsic sands and fine to medium gravels. From 17 feet to 400 feet bls, bedrock was encountered which was comprised of dark green to black-colored clasts including amphibole, epidote, and biotite, with minor amounts of lighter-colored feldspar and quartz minerals. Pyrite minerals are present in the drill cuttings from about 120 feet bls to 400 feet bls in varying amounts. The bedrock is considered to be an amphibolite gneiss.</p><div>2.3WELL INSTALLATION</div><div><p>The well casing installation at the North Well was conducted on February 16, 1996. A record drawing of the North Well is presented in Figure 1. The temporary casing was removed and the borehole reamed with a 14 3/4-inch mill tooth bit to approximately 60 feet bls. Low-carbon steel 10 3/4-inch outside diameter casing with 0.250-inch wall thickness was installed to 60 feet bls. Below 60 feet bls, the well was completed as an open borehole with no casing or screen. The annulus</p></div></div></div><div><div>s:\cobblestone\2906\aoor-sout.well\4\15\96\kw</div><div>2</div></div></div>

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	<p>between the casing and the 14 3/4-inch borehole was sealed with cement grout from 60 feet bls to approximately 3 1/2 feet bls.</p> <p>s:\cblstone\2906\vor-sout.well\4\15\96\kw</p> <p>3</p>

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	<div><div>SECTION 3.0</div><div>POST-CONSTRUCTION NORTH WELL ANALYSIS</div><div>3.1 PUMPING TEST</div><div><p>A modified step-rate discharge aquifer test was conducted at the North Well on March 12 and 13, 1996 to evaluate the production capability of the well and the optimum depth to set the permanent submersible pump. The data from the aquifer test were collected by Brown and Caldwell personnel with the pumping equipment supplied by Stewart Brothers Drilling Company of Milan, New Mexico. The pumping test data is presented in Appendix B.</p><p>The submersible pump was initially set and pumped at a shallow depth (60 feet bls), then progressively lowered and pumped at various pump-setting depths (100 feet, 200 feet and 300 feet bls) to help determine where the permanent pump can be set. A static water level of 48 feet bls was measured prior to the pumping test. At the various pump depth settings, the discharge rate varied from 45 gallons per minute (gpm) to 90 gpm. The discharge rates were calculated using a flow meter. At the pump settings of 60 feet and 100 feet, the groundwater level drawdown reached the submersible pump intake indicating the pump needed to be set at a lower depth. At a pump setting of 200 feet bls, the groundwater level drawdown in the well was 62 feet after 36 minutes of pumping at approximately 65 gpm. The pump was then lowered to 300 feet bls and pumped at a discharge rate of approximately 65 gpm. The water level drawdown after 44 minutes of pumping was approximately 68 feet.</p><p>On March 13, 1996, the pumping test resumed with the pump set at 300 feet bls. The groundwater level drawdown in the well was 66 feet after pumping at an average discharge rate of 61 gpm for 84 minutes. Throughout the test, the specific capacity of the well ranged from 0.8 gpm per foot of drawdown (gpm/ft) to 7.4 gpm/ft. A semi-log plot of the water level drawdown data for the North Well on March 13, 1996 is presented in Figure 2. Using the Cooper-Jacob method of analysis, the transmissivity of the aquifer was calculated to be approximately 380 gallons per day per foot (gpd/ft) as shown in Figure 2. At the conclusion of the pumping test, the water level drawdown recovery was recorded. A semi-log plot of the water level recovery data (Theis Recovery Plot) is presented in Figure 3. Utilizing the Theis Recovery Plot, the transmissivity value was calculated to be approximately 290 gallons per day per foot (gpd/ft) as shown in Figure 3. The calculated transmissivity values are based on a short-term pumping test and the basic assumption that the fractures are interconnected and behave as porous medium. Therefore, these values may vary after long-term pumping due to dewatering of fractures or when other hydrogeologic boundaries are encountered.</p></div><div><div>s:\chisone\2006\mor-sout.well\415196\dw</div><div>4</div></div></div>

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	<div><div>SECTION 4.0</div><div>NORTH WELL RECOMMENDATIONS</div><div>4.1 PUMP SETTING AND DISCHARGE RATE</div><div>Based on the data and analyses presented herein, Brown and Caldwell recommends that the North Well be equipped with a permanent submersible pump capable of producing up to 55 gallons per minute (gpm). The permanent pump equipment should be set at a depth no less than 300 feet bls in order to supply the minimum “net positive suction head” necessary to avoid cavitation in the submersible pump. The pumping water level should not be allowed to drop to within 40 feet above the pump intake. This value is variable and depends upon the pump equipment installed and should be verified at the time of installation. It should also be noted that the pumping test was not a long-term test and continuous long-term pumping of the well may result in greater drawdown than was recorded during the test. As a result, it is also recommended that the well be initially pumped on an 8- to 12-hour cycle to allow for additional well performance evaluation.</div></div> <div><div>s:\chilton\2906\nor-south.well\4\15196\kw</div><div>5</div></div>

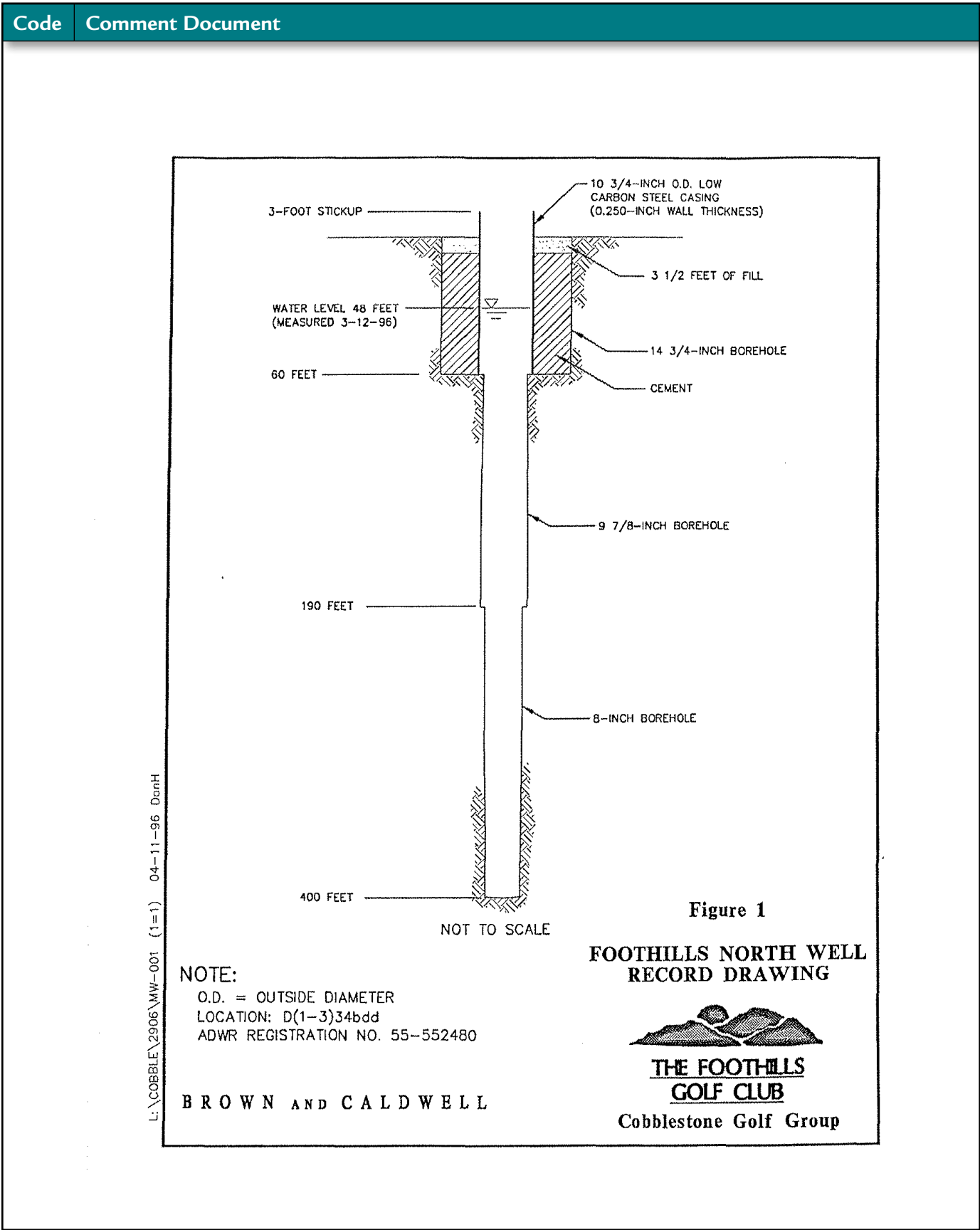
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	<div><div>SECTION 5.0</div><div>DRILLING AND ABANDONMENT OF THE SOUTH WELL</div><div>5.1BOREHOLE DRILLING</div><div><p>The drilling of the South Well was conducted by Stewart Brothers Drilling Company. The pilot borehole was drilled using a Gardner-Denver 1500 drill rig using the air hammer drilling method. Brown and Caldwell personnel performed field inspection and documentation of the key field operations. Drilling operations were performed during daylight hours (7:00 a.m. to 6:00 p.m.) Monday through Friday.</p><p>Drilling of the pilot hole commenced on March 26, 1996, and was completed on March 29, 1996. A 13 3/4-inch diameter pipe was driven to the top of bedrock which was approximately 50 feet bls to help stabilize the hole. A 7-inch diameter liner was installed to 50 feet bls inside the 13 3/4-inch pipe to help facilitate circulation of fluids during the drilling process. The pilot hole was then drilled using a 6 1/4-inch downhole hammer from 50 feet bls to the total depth of 400 feet bls.</p><p>Drilled cuttings were collected at 10-foot intervals throughout the pilot borehole. The samples were preserved in 4-inch by 6-inch cloth sample bags for future reference. An additional set of the drilled cutting samples was placed in specially-designed "ice cube tray" plastic containers and submitted to Cobblestone personnel for archival purposes. A detailed lithologic log of the drilled cuttings from the South Well pilot hole is presented in Appendix C. In general, from the surface to 48 feet bls, the materials penetrated by the South Well are comprised of light brown to pink felsic sands and fine gravels. From 48 feet to 400 feet bls, bedrock was encountered which was comprised of dark green to gray colored clasts including epidote, biotite, and amphibole with minor amounts of lighter-colored feldspar and quartz minerals. The bedrock is considered to be an amphibolite gneiss.</p><div>5.2BOREHOLE ABANDONMENT</div><div><p>During the drilling of the pilot hole the water production of the borehole was monitored. No notable fractures yielding significant groundwater were encountered during the drilling process. At 400 feet bls, the well was developed by airlifting for approximately 1 hour with no significant improvement in groundwater production. The borehole was backfilled with drilled cuttings and abandoned per Arizona Department of Water Resources requirements (Arizona Administrative Code R12-15-816).</p></div></div><div><div>stchiknnel2900uor-sout_wellM/15/96kww</div><div>6</div></div></div>

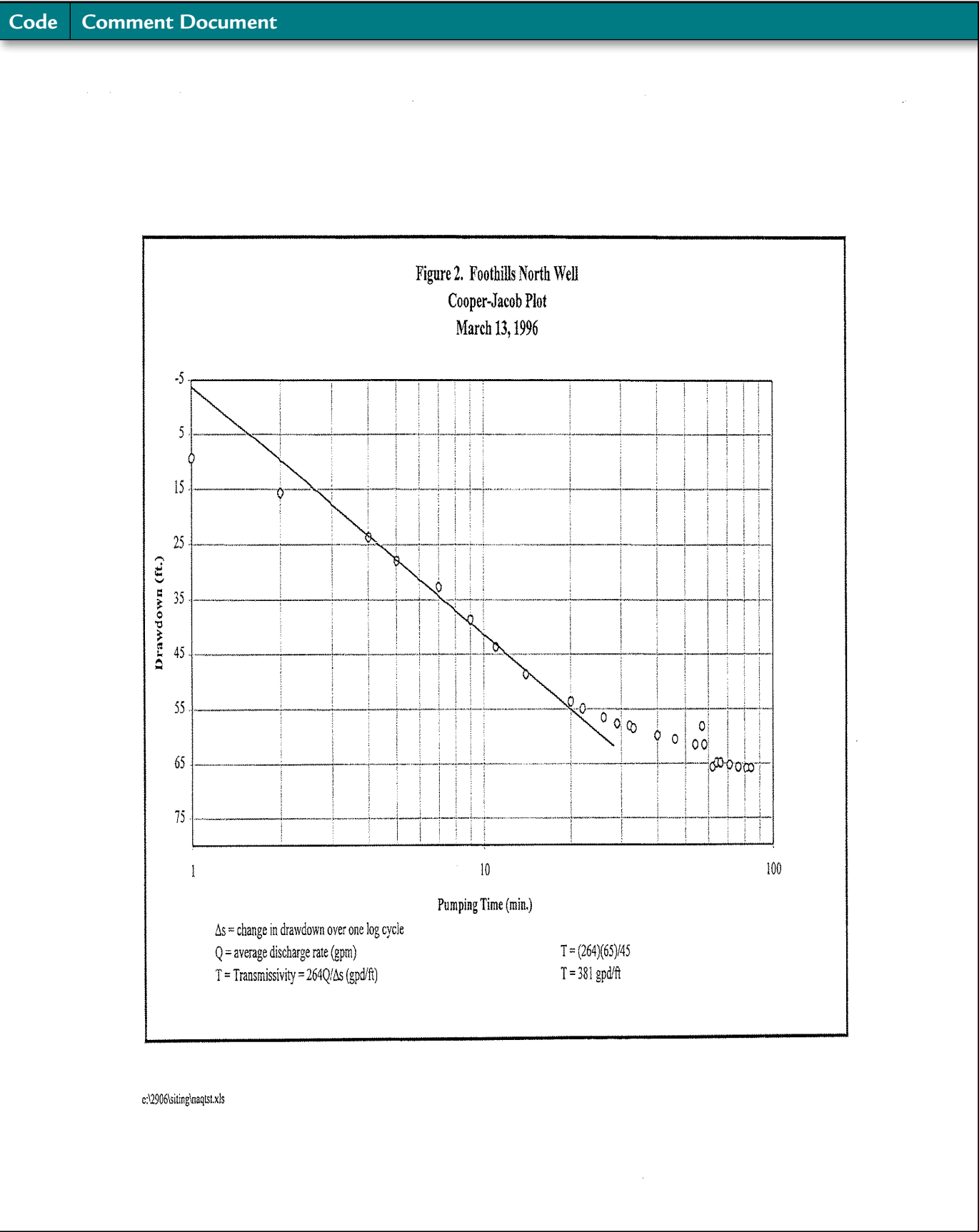
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	<p>FIGURES</p>

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	<div><p>Figure 3. Foothills North Well Recovery Test Data March 13, 1996</p><p>Δs= change in residual drawdown over one log cycle Q=weighted average discharge rate (gpm) T=Transmissivity = $264Q/\Delta s$ (gpd/ft)</p><p>$T=(264)(61)/(56)$ $T=288$ gpd/ft</p></div> <p>e:\2906\siting\naq\st.xls</p>

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	<div>APPENDIX A</div> <div>LITHOLOGIC LOG</div> <div>FOOTHILLS NORTH WELL</div>

Code	Issue	Response

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WELL NO. North Page 1 of 3

Project <i>Cobblestone Golf Gorp</i>	Location <i>D(1-3)34bddd</i>	Elevation <i>~1225 ft MSL</i>	Project No. <i>2906</i>
Drilling Co. <i>Ariz. Beeman Drilling</i>	Drilling Equipment <i>Gardner-Denver 1500</i>	Date Started <i>2/6/96</i>	Date Finished <i>2/8/96</i>
Conductor Casing <i>—</i>	Casing <i>10.75" oD LCS 0-60ft b/s</i>	Screen <i>N/A OPEN HOLE</i>	
Filter Pack <i>NONE</i>	Logged By <i>R. Russell</i>	Drilling Method <i>Air Rotary</i>	
	Geophysical Logs <i>—</i>	Drilling Fluid <i>Air</i>	
Annular Seal <i>CEMENT GROUT</i>	Development <i>Air lift</i>	Completion Depth <i>400 Ft b/s</i>	
		Water Level <i>51 Ft b/s</i>	

Description	Depth (ft)	Drill Rate	Remarks
GRAVELLY SAND - 60% very coarse to coarse, poorly sorted to well sorted sand, primarily felsic w/ minor mafic components, 30% fine gravel, primarily felsic, 10% fine sand - calcareous (54R 14/4) Increase in fine gravel (2-6mm)	0		2/6/96 Begin drilling @ 11AM
	10		Drilling 7/8" bit, Drilled to 80ft. Changed to 1 1/8" mill tooth bit, reamed to 20ft. Set temporary surface casing, changed to 9/16" button bit to drill to bottom of hole.
Green to dark green (54 1/4) clasts of epidote, biotite, amphibole, (60%) and clasts of feldspar and quartz (40%)	20		
	30		
	40		According to driller - drilling becomes hard + slow @ 40-50 ft. b/s
	50		
	60		
	70		
	80		Changed to 9/16" button bit - larger chips
Becomes dark green to black (54 3/4)	90		
	100		
	110		~105 ft. increase in water - fractures
Increase in quartz clasts (30-40%) from 110-120'	120		- measured discharge ~20 gpm
minor pyrite present			-115 ft. increase in water - fractures
			~125 ft. Drilling becomes hard + slow

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WELL NO. <u>North</u> Page <u>2</u> of <u>3</u>																																																													
<table><tr><th>Description</th><th>Depth (ft)</th><th>Drill Rate</th><th>Remarks</th></tr><tr><td rowspan="10">70% dark colored clasts containing biotite, amphibole and epidote with 30% quartz and feldspar clasts, with minor pyrite</td><td>130</td><td></td><td>2/7/96</td></tr><tr><td>140</td><td></td><td>Hard slow drilling - rig chatter</td></tr><tr><td>150</td><td></td><td></td></tr><tr><td>160</td><td></td><td></td></tr><tr><td>170</td><td></td><td></td></tr><tr><td>180</td><td></td><td></td></tr><tr><td>190</td><td></td><td>Changed to 6 1/2" Hammer bit</td></tr><tr><td>200</td><td></td><td>measured discharge @ ~75 gpm</td></tr><tr><td>210</td><td></td><td></td></tr><tr><td>220</td><td></td><td></td></tr><tr><td rowspan="10">Decrease in quartz from 270-280'</td><td>230</td><td></td><td></td></tr><tr><td>240</td><td></td><td>2/8/96</td></tr><tr><td>250</td><td></td><td></td></tr><tr><td>260</td><td></td><td></td></tr><tr><td>270</td><td></td><td></td></tr><tr><td>280</td><td></td><td></td></tr><tr><td>290</td><td></td><td></td></tr><tr><td>300</td><td></td><td></td></tr></table>		Description	Depth (ft)	Drill Rate	Remarks	70% dark colored clasts containing biotite, amphibole and epidote with 30% quartz and feldspar clasts, with minor pyrite	130		2/7/96	140		Hard slow drilling - rig chatter	150			160			170			180			190		Changed to 6 1/2" Hammer bit	200		measured discharge @ ~75 gpm	210			220			Decrease in quartz from 270-280'	230			240		2/8/96	250			260			270			280			290			300		
Description	Depth (ft)	Drill Rate	Remarks																																																										
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	<div>APPENDIX B</div> <div>AQUIFER TEST DATA</div> <div>FOOTHILLS NORTH WELL</div>

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AQUIFER TEST DATA Page 1 of 5

Project: Cobblestone Golf Group			Project No.: 2906			Static Water Level: 47.7 ft. 10:00 AM 3/12/96				
Well Location: D(1-3) 34 bdd			Well No.: Foothills North Well			Measuring Point: 39.5" Above ground surface				
Well Diameter: 0-60' 10"; 60-120' 9 7/8"; 120-140' 8"			Measured By: MLD			Elevation Measuring Point: — Stop of casing				
Pump Setting: Variable			Pump On: Date 3/12/96		Time: 10:10 AM		Available Drawdown:			
Screen Interval(s): 60'-400' open hole			Final Pump Off: Date 3/13/96		Time: 11:23 AM		Distance From Pumping Well: NA			
How Q Measured: Flow Meter			Duration of Aquifer Test: ~ 10 Hours							
Clock Time	Watch Time (t) (minutes)	Recovery Time (t') (minutes)	u/t'	Sounder Reading (feet)	Corrections (feet)	Water Level (feet)	Drawdown (feet)	Discharge (gpm)	Specific Capacity (gpm/ft)	Remarks
10:11	1			58.1	3.3 ft.	54.8	7.1	45	6.4	Pump set @ 60 ft.
10:12	2			59.9		56.6	8.9	45	5.1	
10:13	3			65.7		62.4	14.7	45	3.1	stopped pump drawdown to pump
10:15	5			58.3		55.0	7.3			
10:16	6			56.7		53.4	5.7			
10:17	7			55.6		52.3	4.6			
10:18	8			54.7		51.4	3.7			
10:20	10			53.5		50.2	2.5			
More pump @ 100 ft.										
10:35	25			51.4		48.1	0.4			Begin Pumping
10:39	29			56.73		53.4	5.7			
10:40	30			64.78		61.5	13.7	10	5.1	
10:41	31			66.9		63.6	15.9	60	3.8	
10:42	32			67.2		63.9	16.2	65	4.0	
10:42	33			68.72		65.4	17.7	65	3.7	
10:44	34			71.33		68.0	20.3	65	3.2	
10:50	40			93.00		89.7	42.0	65	1.5	Open Claukey White
10:51	41			96.20		91.9	44.2	65	1.5	
10:52	42			99.20		89.9	42.2	65	1.3	stop pumping
10:53	43			91.94		88.5	40.7			
10:54	44			87.00		83.7	36.0			
10:55	45			82.00		78.7	31.0			
10:57	47			67.00		63.7	16.0			

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AQUIFER TEST DATA											
Page 2 of 3											
Clock Time	Watch Time (t) (minutes)	Recovery Time (t') (minutes)	1/t'	Sounder Reading (feet)	Corrections (feet)	Water Level (feet)	Drawdown (feet)	Discharge (gpm)	Specific Capacity (gpm/ft)	Remarks	
1058	48			64.67	3.34	61.4	13.6				
1059	49			60.00		56.7	9.0				
1100	50			55.00		51.7	4.0				
Moving Pump to 200 ft											
1131	81			52.32		49.0	1.3				
1133	83			59.9		56.5	8.8	65	7.4	Turn on Pump @ 200'	
1134	84			72.36		69.1	21.3	65	3.1		
1135	85			78.71		75.4	27.7	65	2.3		
1136	86			84.30		85.0	37.3	65	1.7		
1137	88			93.54		90.3	42.5	65	1.5	Cond X1000	
1140	90			95.90		92.6	44.9	65	1.4	Temp Stand. 77°F	
1142	92			101.65		97.4	49.6	65	1.3	pH @ 77°F	
1143	93			103.40		100.1	52.4	65	1.2		
1146	96			102.56		103.3	55.5	65	1.2 @ 1146	Cond. 7.27 Cloudy	
1149	99			108.50		105.2	57.5	65	1.1	Temp 81.9 White.	
1150	100			110.65		107.3	59.5	65	1.1	pH 7.63	
1154	104			111		107.7	60.0	65	1.1	Cond 7.05 Temp 79.1	
1154	108			110.98		107.7	59.9	65	1.1	pH 7.18 H ₂ O clearing	
1202	112			112.96		109.3	61.5	65	1.1	Still cloudy white	
1207	117			117.70		109.4	61.7	65	1.1	Cond 6.85 Temp 77.6	
Moving to 9m gpm. (Maximum output for this pump)											
1209	119			113.3		110.0	62.3	90	1.4	pH 7.04	
1212	122			92.0		88.7	41.0			Pump shut off	
1335	205			93.22		49.9	2.2			Cond clear H ₂ O coming	
1404	234			52.85	52.15	49.5	1.7			Back to hole.	
Pump @ 200'											
1406	236			52.75		49.5	1.7				
1404	238			61.90		58.6	10.9	65	6.0	Begin pumping	
1404	239			68.85		65.6	17.8	65	3.6		
1410	240			75.12		71.8	24.1	65	2.7	Cond 7.27	
1411	241			83.14		79.9	32.1	65	2.0	Temp 82.2	
1412	242			87.94		84.7	36.9	65	1.8	pH 7.03	
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AQUIFER TEST DATA

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Clock Time	Watch Time (t) (minutes)	Recovery Time (t') (minutes)	t/t'	Sounder Reading (feet)	Corrections (feet)	Water Level (feet)	Drawdown (feet)	Discharge (gpm)	Specific Capacity (gpm/ft)	Remarks
1414	244			96.00	3.3 Ft.	92.7	45.0	65	1.4	
1416	246			98.77		95.5	47.7	65	1.4	
1418	248			103.72		100.4	52.7	65	1.2	
1420	250			106.03		102.7	55.0	65	1.2	
1422	252			107.80		104.5	56.8	65	1.1	
1426	256			111.60		108.3	60.6	65	1.1	
1429	259			112.90		109.6	61.9	65	1.1	Water Milky White
1432	262			114.35		111.1	63.3	65	1.0	Comp. 6.84 Temp 79.2
1437	267			116.22		112.9	65.2	65	1.0	pH 7.24
1442	272			117.60		114.4	66.6	65	1.0	High setting for 5 sec
1447	277			119.55		115.3	67.5	65	1.0	water turned clear
1450	280			109.00		105.7	58.0 pump shut off			Water Milky White
1451	281			107.00		103.7	56.0	0		Comp 6.7 Temp 79.5 pH 7.0
1455	285			85.00		81.7	34.0	0		
1500	290			10.43		57.1	9.4	0		Can hear water coming into hole at first now just a trickling sound.
1533	323			55.02		51.7	4.0	stroke		Stop Pumping @ 249
1536	326			79.47		76.2	28.4	65	2.3	
1539	329			94.20		90.9	43.2	65	1.5	
1542	332			99.10		95.8	48.1	65	1.4	Comp 6.6 Temp 78.9
1545	338			110.7		107.4	59.7	65	1.1	pH 6.96 Milky white
1555	345			114.9		111.5	63.8	65	1.0	turning clear
1600	350			117.00		113.7	66.0	65	1.0	pH 6.97 Comp 6.55
1607	357			118.91		115.6	67.9	65	1.0	Temp 78.8
1611	361			119.4		116.1	68.4	65	1.0	water white milky
1615	365			96.1		92.8	45.1	pump shut off (empty tank) air bubbles		
1617	367			92.00		78.7	31.0	0		
1618	368			75.00		71.7	24.0	0		
1619	369			70.00		66.7	19.0	0		

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BROWN AND CALDWELL

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AQUIFER TEST DATA											
Page 4 of 5											
Clock Time	Watch Time (t) (minutes)	Recovery Time (t') (minutes)	t/t'	Sounder Reading (feet)	Corrections (feet)	Water Level (feet)	Drawdown (feet)	Discharge (gpm)	Specific Capacity (gpm/ft)	Remarks	
1622	372			65.00	33.54	61.7	14.0	0			
1629	379			60.00		56.7	9.0	0			
1647	397			46.65		53.4	5.6	0			
3-13-96	Test 5										
0706				51.32		48.02		0		Begin New Test	
								0		Pump Not Working	
0959				51.53		48.23		0		Start Pumping	
1000	1			60.78		57.5	9.5	65	6.9		
1001	2			67.00		63.7	15.7	65	4.1		
1003	4			75.00		71.7	23.7	65	2.7	cond 8.13	
1004	5			79.25		76.0	27.9	65	2.3	Temp 80.4	
1006	7			84.00		80.7	32.7	65	2.0	pH 7.28	
1008	9			90.00		86.7	38.7	65	1.7	Slightly Cloudy (white)	
1010	11			95.00		91.8	43.8	65	1.5		
1013	14			100.00		96.7	48.7	65	1.3		
1019	20			105.00		101.7	53.7	65	1.2	Cond 7.13	
1021	22			106.33		103.0	55.0	65	1.2	Temp 81.3	
1025	26			109.00		104.7	56.7	65	1.1	pH 6.97	
1026	29			109.00		105.7	57.7	65	1.1	Slightly Cloudy (white) clings	
1031	32			109.50		106.2	58.2	65	1.1	after 2 mins.	
1032	33			110.00		106.7	58.7	65	1.1	Cond 6.66 Temp 78.1	
1039	40			111.20		107.9	59.9	65	1.1	pH 6.9. Slightly Cloudy (white)	
1045	46			112.00		108.7	60.7	65	1.1	Clear in 2 mins.	
1053	54			113.00		109.7	61.7	65	1.1		
1056	57			109.65		106.4	58.3	50	0.9		
1057	58			113.00		109.7	61.7	65	1.1		
1101	62			117.00		113.7	65.7	50	0.8		
1103	64			116.29		113.0	65.0	55	0.8		
1105	66			116.28		113.0	65.0	55	0.8		
1110	71			116.60		113.3	65.3	55	0.8	Temp 77.6 Cond 6.39	
1115	76			117.00		113.7	65.7	55	0.8	pH 6.91	
1120	81			117.00		113.7	65.7	53	0.8		
1123	84			117.25		114.0	65.9	53	0.8	End Test.	
BROWN AND CALDWELL											
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Code	Issue	Response

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Code	Issue	Response
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Code	Comment Document
	<div>APPENDIX C</div> <div>LITHOLOGIC LOG</div> <div>FOOTHILLS SOUTH WELL</div>

Code	Issue	Response

Code Comment Document

WELL NO. South Well Page 1 of 3

Project <u>Cobblestone Golf Group</u>	Location <u>D(1-3)34 dca</u>	Elevation <u>~ 1100 ft msl</u>	Project No. <u>2906</u>
Drilling Co. <u>Stewart Brothers Drilling</u>	Drilling Equipment <u>Gardner-Denver 1500</u>	Date Started <u>3/26/96</u>	Date Finished <u>3/29/96</u>
Conductor Casing <u>NA</u>	Casing <u>NA</u>	Screen <u>NA</u>	
Filter Pack <u>NA</u>	Logged By <u>R. Zoessle I</u>	Drilling Method <u>Air Hammer/Rotary</u>	
	Geophysical Logs <u>NA</u>	Drilling Fluid <u>Air</u>	
Annular Seal <u>Abandoned per ADWR A.A.C. R1245-816.</u>	Development <u>NA</u>	Completion Depth <u>400 Ft. b/b</u>	
		Water Level <u>116.1 Ft b/b</u>	
Description	Depth (ft)	Drill Rate	Remarks
GRAVELLY SAND - 70% coarse to very coarse, poorly sorted sand, predominantly felsic with granite, K-spar (51R 94) 30% fine to v. fine sand	0		3/26/96 Begin Drilling - Drive 13 1/8" pipe to 50 ft. Install 7" liner to 50 ft. Begin drilling 7/8" downhole hammer. No sample collected
	10		
	20		NO sample collected, cuttings primarily felsic sand
	30		
INCREASE in dark minerals (56Y 4/1)	40		
	50		Bedrock - Hard drilling @ 40 Ft. 3/27/96
	60		
	70		
60% dark green to black (56Y 4/1) clasts containing epidote, biotite, amphibole, with 40% clasts of quartz and feldspar	80		
	90		
	100		
	110	50 ft/hr	
	120	120 ft/hr	First Water @ 125 ft.

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BROWN AND CALDWELL

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Code	Comment Document			
WELL NO. <u>South Well</u> Page <u>2</u> of <u>3</u>				
Description		Depth (ft)	Drill Rate	Remarks
increase in dark green to black clasts of epidote, biotite and amphibole (75%) quartz and feldspar (25%)		130	60 ft/hr	3/28/96
		140	30 ft/hr	
		150		
		160	60 ft/hr	
		170		
		180	67 ft/hr	
		190	50 ft/hr	
		200		
		210		
		220		
		230		
		240		
		250		
		260		
		270		
		280		
		290		
		300		

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BROWN AND CALDWELL

Code	Issue	Response

Code Comment Document

WELL NO. South Well Page 3 of 3

Description	Depth (ft)	Drill Rate	Remarks
<div><div>↓</div><div>change in color to light green to green (56 3/4)</div><div>↓</div><div>increase in dark green to black minerals, with minor quartz</div><div>↓</div><div>increase in quartz (40%) w/ dark green to black minerals (60%)</div><div>↓</div></div>	310		3/29/96
	320	16 F/Hr	
	330	24 F/Hr	
	340	25 F/Hr	
	350	21 F/Hr	
	360	20 F/Hr	
	370	25 F/Hr	
	380	22 F/Hr	
	390	27 F/Hr	
	400	21 F/Hr	
			Measured discharge @ 5 gpm
			Total depth 400 Ft.
			Measured discharge @ 7 gpm

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BROWN AND CALDWELL

Code Issue Response

Code	Comment Document
	<div><p><u>Attachments</u></p><p>Five</p><p>South Mountain Land Acquisitions - The spreadsheet was created by ADOT on June 11, 2013.0It has W in the right side if it is a parcel in the western alignment; it has an E in the right side if it is a parcel in the eastern alignment. Parcels 7-11316 and 7-10612 are two parcels in the western alignment that were not included in the spreadsheet. The parcel transmittal sheet for each is also attached.</p></div>

Code	Issue	Response

Code	Comment Document			
South Mountain Acquisitions				
Sorted by Acquisition Date				
06/11/13				
PARCEL	TRACS	OWNER	ACQUISITION DATE	ACQUISITION COST
✓ 7-04226	H087201R	ESTATE OF AMCOR INVESTMENTS CORP	09/25/86	\$7,371,339.00
✓ 7-05060	H543901R	FOOTHILLS JOINT VENTURE	02/29/88	\$18,046,663.15
7-05914	H543901R	TOM L MILLS ET UX	06/16/88	\$568,713.00
7-05933	H543901R	PHOENIX FIRESTONE TIRE	10/27/88	\$412,050.25
7-06376	H543901R	ANNE L LEWIS	07/19/90	\$215,213.75
7-05060-A	H543901R	FOOTHILLS JOINT VENTURE	08/02/90	\$904.00
7-07169	H543901R	EARL H GOODMAN JR	11/04/93	\$52,622.74
7-07577	H087201R	GWENDOLYN E MASON TRUST	01/23/98	\$9,751.00
7-09912	H543901R	HIGHLAND RIDGE CONST COMPANY LLC	11/09/01	\$2,092,250.08
7-10463	H543901R	PATTERSON BRIAN G ET UX	04/19/06	\$1,961,545.00
7-10466	H543901R	PERKOFSKI RYAN	05/25/06	\$446,419.95
7-10467	H543901R	DEL E WEBB FOOTHILLS CORPORATION	06/15/06	\$8,087.12
7-10465	H543901R	WALKER ROBERT L ET UX	07/28/06	\$448,370.55
7-10531	H543901R	SHOTT CHARLES E & SHELLEY L	02/26/07	\$424,108.84
7-10544	H543901R	KRAEMER ANTHONY K	04/11/07	\$368,192.50
7-10489	H543901R	RENDINA JR VICTOR ET UX	05/24/07	\$370,506.17
7-10534	H543901R	GOODMAN MICHAEL S	06/01/07	\$338,454.50
7-10537	H543901R	DOUGLAS DALE	06/05/07	\$954,653.00
7-10601	H543901R	JTK HOLDINGS, LLC	06/08/07	\$384,421.00
7-10538	H543901R	CARDELLEN DENNIS R ET UX	06/14/07	\$459,733.50
7-10539	H543901R	HOLLAND PETER M ET UX	06/20/07	\$471,833.00
7-10536	H543901R	AUTREY STEPHEN ET UX	06/22/07	\$464,886.00
7-10605	H543901R	SCHILKE CODY W	07/03/07	\$578,720.00
7-10535	H543901R	DESERT LAKES CUSTOM HOMES LLC	08/28/07	\$470,452.74
7-10768	H543901R	NELSON JEFFREY J	08/29/07	\$544,968.44
7-10765	H543901R	WHITTY FAMILY TRUST	10/09/07	\$1,075,761.29
7-10600	H543901R	JR SKAGGS PROPERTIES LLC	10/19/07	\$588,362.42
7-10796	H543901R	SMITH CECIL A ET UX	11/13/07	\$345,010.93
7-10607	H543901R	SPEEDCO INC	12/20/07	\$3,035,462.72
7-10612	H543901R	FRED AND HELEN J MARTINEZ FAMILY TR	12/21/07	\$1,334,504.74
7-10804	H543901R	SMITH RUTH ANN	03/10/08	\$322,625.67
7-10806	H543901R	CUNNINGHAM PHILIP S	03/25/08	\$355,921.33
7-10805	H543901R	PANDYA MAHENDRAKUMAR S ET UX	04/18/08	\$321,568.89
7-10869	H543901R	JENSEN CHARLOTTE C	05/23/08	\$322,778.50
7-10870	H543901R	PONGRATZ STEPHEN P ET AL	05/30/08	\$470,989.95
7-10802	H543901R	AHWATUKEE LAND INVESTMENTS LLC	06/12/08	\$367,158.83

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Code	Issue	Response

Code	Comment Document

Code	Issue	Response

Code

Comment Document

RIGHT OF WAY/GROUP
205 South 17th Avenue Phoenix, Arizona

PARCEL TRANSMITTAL

Transaction Cutoff Date: Sept. 14, 2010

Processing Unit	Initial	Date	Processing Unit	Initial	Date
Consultant Reviewer/ Acquisition Reviewer	<i>RLW</i>	<i>9/13/10</i>	Operations - Accounting	<i>MR</i>	<i>9-14-10</i>
Plans - Delineation	<i>CB</i>	<i>9/13/10</i>	Operations - Manager	<i>PS</i>	<i>9/16/10</i>
Titles	<i>Ree</i>	<i>9/13/10</i>	Operations - Accounting	<i>MC</i>	<i>3/9/11</i>
Project Mgt - Project Schedule	<i>TC</i>	<i>9/13/10</i>	R/W Record Center	<i>SA</i>	<i>3-31-11</i>

Grantor & Address: ☒ Husband /Wife

Peter A. Noli & Maryann Noli
6130 W. Dobbins, RT 2, Box 955
Laveen, AZ 85339

Project: 202L MA 000 H5439 01R
Highway: SOUTH MOUNTAIN FREEWAY
Section: Jct. I-10W - Jct. I-10S
Parcel: 7-11316
Assessor #: 300-02-021G
☐ Federal Aid Involvement
☐ MAG ☐ PAG ☐ SW ☒ RTP # *2468*

SETTLEMENT DATA: ☐ Partial ☒ Total

Land \$285,000.00
10.31 Acres, 449,104 Square Feet
Improvements \$N/A
0 Square Feet
Severance Damages \$N/A
Cost-to-Cure \$N/A
Temporary Entry \$N/A
Temporary Construction Easement \$N/A
Administrative Settlement \$N/A
Less Salvage \$N/A
Sub Total \$285,000.00
Closing Costs \$7,074.88

TOTAL \$292,074.88

DESCRIPTION:

W2, SE4, SEC 6, T1S, R2E, GSRBM

Maricopa County, Arizona

APPRAISAL DATA:

☐ Appraisal not required
Appraiser: Balfutut ☐ Staff ☒ Fee
Approved Appraisal Amount: \$285,000.00
Appraisal Review Amount: \$285,000.00

INSTRUMENTS IN FILE:

Warranty Deed

Record Thru Escrow

☒ ☒
☐ ☐
☐ ☐
☐ ☐

COMMENTS:

Land check to Security Title
Acquisition Code: R301
☐ Acquired by Consultant, Contract #
☐ Escrow Waived
☐ Right of Way Contract
Approved by:
☐ Salvage Sheet Attached
☐ Equal to cost of removal
☐ Offer reduced by salvage amount established
☐ Administrative Settlement
Approved by: _____ on _____
Amount over approved appraisal \$
Excess Land Acquired (if yes, copy to Prop. Mgt.)
Acres, Square Feet
☐ Repurchase Rights Waived
Yes Irrigation Water Right or Well *160195* *nd*
Certificate or Well # 58 (if yes, copy to Titles)
☐ See additional information attached

WARRANT NEEDED BY: September 20, 2010

AGENT PHONE: 602-712-8918)

CERTIFICATION

I hereby certify that, to the best of my knowledge and belief, all statements contained in this parcel file are a full and complete record of all agreements and considerations between the Negotiator and the Grantor, and that such above agreement was reached without coercion, promises other than those shown in the Right of Way Contract, or threats of any kind whatsoever by or to either party.

Further, I have no direct or indirect, present or contemplated future personal interest in such property, nor will I in any way benefit from the acquisition of such property.

Jacki Valinski

Jacki Valinski, Right of Way Agent
ADOT
Parcel Transmittal 12/07/06

APPROVED *9-16-10*
DIRECTOR OF ADOT

PARCEL: 7-11316

Code	Issue	Response

Code

Comment Document

ARIZONA DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY GROUP
205 South 17th Avenue Phoenix, Arizona

PARCEL TRANSMITTAL

Transaction Cutoff Date: 12/11/07

Processing Unit	Initial	Date	Processing Unit	Initial	Date
Consultant Reviewer/ Acquisition Reviewer	ML	12-11-07	Operations - Accounting	ML	12-11-07
Plans - Delineation	Co	12-10-07	Operations - Manager	PS	12/13/07
Titles	Ree	12/11/07	Operations - Accounting	de	11/8/08
Project Mgt - Project Schedule	MLM	12-11-07	R/W Record Center	JH	1-10-08

Grantor & Address: ☒ Husband /Wife

Mr. Fred Martinez, Trustee
Mrs. Helen J. Martinez, Trustee
5717 West Washington
Phoenix, Arizona 85043

Project: 202 MA 000 H543901R
Highway: SOUTH MOUNTAIN (202L)
Section: Jct. I-10S - Jct. I-10W
Parcel: 7-10612
Assessor #: 104-04-512
☐ Federal Aid Involvement
☐ MAG ☐ PAG ☐ SW ☒ RTP #1605

SETTLEMENT DATA: ☐ Partial ☒ Total

Land \$1,230,000.00
3.415 Acres, 148,777 Square Feet
Improvements \$N/A
Square Feet
Severance Damages \$N/A
Cost-to-Cure \$N/A
Temporary Entry \$N/A
Temporary Construction Easement \$N/A
Administrative Settlement \$75,000.00
Lost Development Cost 24,591.74
Less Salvage \$N/A
Sub Total \$1,329,591.74
Closing Costs \$4,913.00
TOTAL \$1,334,504.74

INSTRUMENTS IN FILE: Record Thru Escrow
Warranty Deed ☒ ☐ ☐
☐ ☐ ☐

COMMENTS: Please call agent to pick up check.
Acquisition Code: R301
☐ Acquired by Consultant, Contract #
☐ Escrow Waived
☐ Right of Way Contract
Approved by:
☐ Salvage Sheet Attached
☐ Equal to cost of removal
☐ Offer reduced by salvage amount established
☒ Administrative Settlement
Approved by: Brian Rockwell on 11/28/07
Amount over approved appraisal \$75,000
No Excess Land Acquired (If yes, copy to Prop. Mgt.)
Acres, Square Feet
☒ Repurchase Rights Waived
No Irrigation Water Right or Well
Certificate or Well # (If yes, copy to Titles)
☐ See additional information attached

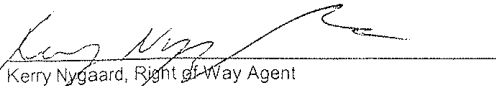
DESCRIPTION:
LOT 1, VAN BUREN STREET/57TH DRIVE
Maricopa County, Arizona

APPRaisal DATA:
☐ Appraisal not required
Appraiser: Baltulat ☐ Staff ☒ Fee
Approved Appraisal Amount: \$1,230,000
Appraisal Review Amount: \$1,254,591.74

WARRANT NEEDED BY:
AGENT PHONE: 602-712-7432

CERTIFICATION

I hereby certify that, to the best of my knowledge and belief, all statements contained in this parcel file are a full and complete record of all agreements and considerations between the Negotiator and the Grantor, and that such above agreement was reached without coercion, promises other than those shown in the Right of Way Contract, or threats of any kind whatsoever by or to either party.
Further, I have no direct or indirect, present or contemplated future personal interest in such property, nor will I in any way benefit from the acquisition of such property.


Kerry Nygaard, Right of Way Agent
Parcel Transmittal 12/07/06

APPROVED 12-11-07
DIRECTOR OF ADOT

PARCEL: 7-10612

Code	Issue	Response

Code	Comment Document
	<div><div><div><div><div><div></div></div></div><div><div><div></div><div></div></div></div><div><div><div></div><div></div></div></div><div><div><div></div></div></div></div></div></div> <div><div>From: Howard Shanker</div><div>To: Projects</div><div>Subject: Additional Comment on the SMF Loop 202 Freeway DEIS - Filed by PARC et al.</div><div>Date: Wednesday, July 24, 2013 2:12:06 PM</div><div>Importance: High</div></div>

Addendum to the Comments Filed on July 23, 2013 By:

Protecting Arizona Resources and Children, Inc. (PARC); The Foothills Community Association; The Foothills Club West Community Association; The Lakewood Community Association; The Calabrea Community Association; Don't Waste Arizona, Inc. (DWAZ); Gila River Alliance for a Clean Environment (GRACE); Gila River Environmental Youth (GREY); Patricia Lawlis; Timothy Lank; Chad Blostone; Michael Hinz; Chris Boettcher; Phoenix Mountains Preservation Council (PMPC) - (collectively referred to herein as "Commenters").

1

1.

As discussed in Commenters' previous submission, the DEIS failed to adequately consider the health impacts resulting from freeway related air pollution. Given the large number of schools, community areas, and homes within approximately one-half mile of the proposed right-of way (the "Hot Zone" for health impacts), ADOT should also have considered, *inter alia*, future health care costs and impacts on human capital in general as indirect and/or cumulative impacts under NEPA. It is likely that thousands of children living and/or going to school in this Hot Zone will suffer from, in part, inhibited lung growth and development, as well as asthma -- as a direct and proximate result of the freeway. The primary health threat from proposed freeway air pollution to adults will be increased risks of chronic cardiovascular illness, acute myocardial infarctions, and premature mortality. Given the certainty of the science at issue, future health care related costs and health related impacts in general should have been considered in the DEIS.

2.

Commenters expressly incorporate herein, by this reference, any comment on the DEIS submitted by: The Sierra Club; PIRG/Arizona PIRG; the Gila River Indian Community; and any member of any of the above identified organizations/associations.

Thank you.

Howard M. Shanker

The Shanker Law Firm, PLC

www.ShankerLaw.net

Offices

700 E. Baseline Rd., Bldg. B

201 E. Birch Avenue, Ste. 10

Tempe, Arizona 85283

Flagstaff, Arizona 86001

Phone: (480) 838-9300

Fax: (480) 838-9433

Indian Law *Environmental & Natural Resources* *Personal Injury* *Civil Litigation* *Adoption*

This e-mail communication, including any attached files, may contain material that is proprietary, privileged,

Code	Issue	Response
1	Air Quality, Health Risk Assessment	<div><div>The carbon monoxide analysis was updated in the Final Environmental Impact Statement. Although a qualitative analysis of particulate matter (PM₁₀) was presented in the Draft Environmental Impact Statement, a quantitative project-level particulate matter (PM₁₀) hot-spot analysis is included in the Final Environmental Impact Statement. The results of the air quality updates are summarized in the prologue to the Final Environmental Impact Statement (page xiii) and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement. The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones.</div><div>The emission modeling developed for the proposed action showed that for the mobile source air toxics study area, there would be little difference in total annual emissions of mobile source air toxics emissions between the Preferred and No-Action Alternatives (less than a 1 percent difference) in 2025 and 2035. With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions (see discussion beginning on page 4-77 of the Final Environmental Impact Statement).</div><div>The Role of Health Risk Assessment in a National Environmental Policy Act Context</div><div>The Federal Highway Administration’s National Environmental Policy Act documents are developed under two guiding regulations: the Council on Environmental Quality’s National Environmental Policy Act regulations applicable to all federal agencies (40 Code of Federal Regulations Parts 1500–1508) and the Federal Highway Administration’s implementing regulations governing Federal Highway Administration National Environmental Policy Act documents (23 Code of Federal Regulations Part 771). In its mobile source air toxics guidance, the Federal Highway Administration discusses 40 Code of Federal Regulations Part 1502.22 and acknowledges that while much work has been done to assess the overall health risk of mobile source air toxics, analytical tools and techniques for assessing project-specific health outcomes as a result of lifetime exposures to mobile source air toxics remain limited. These limitations impede the ability to evaluate the potential health risks attributable to exposure to mobile source air toxics as part of the decision-making process in the National Environmental Policy Act context. However, as with any analysis that the Federal Highway Administration conducts for National Environmental Policy Act purposes, the Federal Highway Administration’s approach for mobile source air toxic analysis in National Environmental Policy Act documents is informed not just by 40 Code of Federal Regulations Part 1502.22, but by all applicable Council on Environmental Quality requirements.</div></div>

Code	Comment Document
	<p>confidential, or otherwise legally exempt from disclosure. This communication is intended solely for the use of the individual or entity to which it is addressed. If you are not the intended recipient or the person responsible for delivering this communication to the intended recipient, you are prohibited from retaining, using, disseminating, forwarding, printing or copying this communication. If you have received this communication in error, please immediately notify the sender via return e-mail or telephone.</p> <p>IRS CIRCULAR 230 DISCLOSURE: To ensure compliance with requirements imposed by the IRS, we inform you that, to the extent this communication (or any attachment) addresses any tax matter, it was not written to be (and may not be) relied upon to (i) avoid tax-related penalties under the Internal Revenue Code, or (ii) promote, market or recommend to another party any transaction or matter addressed herein (or in any such attachment).</p>

Code	Issue	Response
1 (cont.)		<p>The appropriateness of air toxics health risk assessment as an analysis method for National Environmental Policy Act documents is discussed below, in the context of Council on Environmental Quality requirements for these documents. In addition to the 40 Code of Federal Regulations Part 1502.22 provisions regarding uncertainty and limitations discussed in the Federal Highway Administration’s MSAT Interim Guidance Appendix C, three other provisions of the Council on Environmental Quality regulations are particularly relevant to the topic of health risk assessment:</p> <p><i>40 Code of Federal Regulations § 1500.1(b): NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA. Most important, NEPA documents must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail.</i></p> <p><i>40 Code of Federal Regulations § 1502.1: An environmental impact statement is more than a disclosure document. It shall be used by Federal officials in conjunction with other relevant material to plan actions and make decisions.</i></p> <p><i>40 Code of Federal Regulations § 1502.2: (a) Environmental impact statements shall be analytic rather than encyclopedic. (b) Impacts shall be discussed in proportion to their significance.(c) Environmental impact statements shall be kept concise and shall be no longer than absolutely necessary to comply with NEPA and with these regulations.</i></p> <p>Section 1500.1(b) states that information for decision making must be of high quality and based on accurate scientific analysis. Air toxics health risk assessments can involve large uncertainties. The mobile source air toxic health risk assessment uncertainty builds on itself—each step of the analysis involves uncertainties, including modeling traffic and then modeling emissions, and using this estimated output to model dispersion/concentrations, which provide information for estimating or assuming exposures to those concentrations, and finally predicting health outcomes. Major uncertainties are associated with traffic and emissions projections over a 70-year period, and dispersion models are typically held to a “factor of 2” performance standard. Health impacts of mobile source air toxics in the U.S. Environmental Protection Agency Integrated Risk Information System are based on a 70-year lifetime exposure, which introduces significant uncertainty (e.g., on average, people in the United States change residence approximately once every 8 years and change jobs once every 3). Finally, as noted above, the U.S. Environmental Protection Agency’s Integrated Risk Information System provides toxicity (risk) values for various pollutants and routes of exposure; in a health risk assessment, the Federal Highway Administration would compare calculated concentrations of mobile source air toxic pollutants to the Integrated Risk Information System values to estimate health risk. In the Integrated Risk Information System, the U.S. Environmental Protection Agency states the toxicity values are believed to be accurate to within an order of magnitude (a factor of 10). The total cumulative uncertainty involved in highway project health risk assessment is much larger than the change in emissions attributable to projects (typically a few percentage points). In this context, the information would not necessarily have a strong nexus to the requirements for high-quality information and accurate scientific analysis.</p>

Code	Comment Document

Code	Issue	Response
1 (cont.)		<p>Section 1500.1(b) also directs agencies to focus their National Environmental Policy Act analysis and documentation on issues that are truly significant to the action in question. In the context of mobile source air toxics, the Federal Highway Administration must consider whether changes in mobile source air toxic emissions attributable to a project have the potential for significant health risk. Using cancer risk as an example, the U.S. Environmental Protection Agency estimates that the overall risk of cancer in the United States is approximately 330,000 in a million, and that air toxics (from all sources) are responsible for a risk of approximately 50 in a million. In its most recent mobile source air toxics rule-making, the U.S. Environmental Protection Agency estimated mobile source air toxic cancer risk, after implementation of emissions controls, at approximately 5 in a million (or 0.0015 percent of overall cancer risk from any cause). For the Preferred Alternative, the mobile source air toxic emissions analysis for the Study Area found little difference in total annual emissions of mobile source air toxic emissions between the Preferred and No-Action Alternatives (less than a 1 percent difference) in 2025 and 2035. With the Preferred Alternative in 2035, modeled mobile source air toxic emissions would decrease by more than 80 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions (see the discussion beginning on page 4-77 of the Final Environmental Impact Statement).</p> <p>In summary, available information from the U.S. Environmental Protection Agency indicates that mobile source air toxics are a small component of overall cancer risk, and the analysis for the Final Environmental Impact Statement indicates both that the Preferred Alternative would result in a small change in the emissions contributing to this risk and that emissions will decline by a large amount regardless of alternative.</p> <p>As described above and in the air quality technical report, results from the health risk assessment would be influenced more by the uncertainty introduced into the process through assumptions and speculations rather than by genuine insight into the actual health impacts directly attributable to mobile source air toxic exposure associated with a project. Therefore, outcomes of such a health risk assessment do not provide useful information for decision makers, as required by Section 1502.1. The Federal Highway Administration emissions analysis meets the requirement to produce information that is useful for both disclosure and decision making because it allows the public and decision makers to see which alternative has less mobile source air toxic emissions, with much less uncertainty than a health risk assessment.</p>

Code	Comment Document

Code	Issue	Response
1 (cont.)		<p>Given the uncertainty of a mobile source air toxic health risk assessment, the Federal Highway Administration instead addresses the potential impacts of mobile source air toxics through an emissions assessment in its National Environmental Policy Act documents. For smaller projects with a lower likelihood of a meaningful impact, this discussion is qualitative. For larger projects, emissions analysis is conducted. The Federal Highway Administration approach is consistent with the Council on Environmental Quality’s direction in Section 1502.2(b) to discuss impacts in proportion to their significance. The results of an emissions analysis can be summarized concisely in a National Environmental Policy Act document and provide useful information for decision makers (e.g., an alternative that has lower emissions is likely to be “better” from a mobile source air toxics health risk standpoint than one that has higher emissions).</p> <p>While the U.S. Environmental Protection Agency and the Federal Highway Administration both agree on the usefulness of addressing mobile source air toxics in National Environmental Policy Act documents for highway projects, the agencies disagree about the value of health risk assessment as a method for doing so.</p>

Code	Comment Document

Code	Issue	Response
1 (cont.)		<p>Another consideration with respect to health impacts is that the Preferred Alternative would also reduce in-vehicle mobile source air toxics exposure as opposed to the No Action Alternative. The U.S. Environmental Protection Agency has found that in-vehicle benzene concentrations were between 2.5 and 40 times higher than nearby ambient concentrations, based on a review of studies discussed in the Regulatory Impact Analysis for the U.S. Environmental Protection Agency’s 2007 mobile source air toxics rule-making (Final Regulatory Impact Analysis, Environmental Protection Agency 420-R-07-002, 3-17 [February 2007]). Construction of the Preferred Alternative would result in a reduction in benzene exposure to drivers and passengers for two reasons: decreased travel times (motorists would spend less time in traffic to reach their destinations) and lower emissions rates (attributable to speed improvements). Reducing on-road exposure would provide a health benefit for motorists using the roadway network. Congestion relief resulting from the proposed freeway would provide localized air quality emissions reductions on area freeways and arterial streets and at interchanges, benefiting users of area highways and those living near congested roads.</p> <p>The Federal Highway Administration determined that a supplemental environmental impact statement is not required at this time because there were no changes to the proposed action that will result in significant environmental impacts not evaluated in the Draft Environmental Impact Statement nor is there new information relevant to environmental concerns and bearings on the proposed action or its impacts that will result in significant environmental impacts not evaluated in the Draft Environmental Impact Statement.</p>

Code	Comment Document
1	<p>July 16, 2013</p> <p>Mr. Alan Hansen- Team Leader-PEAR Federal Highway Administration 4000 N. Central Avenue- Suite 1500 Phoenix, AZ 85012-3500</p> <p>Dear Mr. Hansen:</p> <p>RE: South Mountain Freeway Meeting</p> <p>As your schedule permits I would like to meet with you to discuss the proposed South Mountain Freeway Loop 202 and the impacts it will have on my village if it is built on Pecos Road.</p> <p>My name is Jim Jochim and I am the Treasurer of PARC (Protecting Arizona Resources and Children) we are a 501 C 3 and were incorporated in 2006. I have been actively involved in the public freeway meetings for over a decade and I had the privilege of meeting Mr. Bill Vachon at the SMCAT meetings before he retired .</p> <p>Enclosed are several copies of the Ahwatukee Republic dated June 14, 2013 in which I am pictured on the front page and on page four. I am also enclosing a number of PARC business cards for your distribution.</p> <p>Please advise what date and time works best for your schedule and I will be there because as a retiree from AT&T I have a lot of 'flex' time.</p> <p>Best regards,</p> <p></p> <p>Jim Jochim 1231 E. Desert Flower Lane Phoenix, AZ 85048 T# 480-460-2535 Fax# 480460-2898 E-mail: Jochim1@cox.net</p> <p>Enclosures : AFN paper and PARC business cards</p>

Code	Issue	Response
1		Comment noted.

Code Comment Document

Speak up now or accept the inevitable outcome

Five days — that is all the time remaining for public comments on the South Mountain Loop 202 Freeway — then it is over. Finished. The end.

So SPEAK UP now or accept the inevitable outcome — Pecos Road will turn into the South Mountain Loop 202 Freeway.

Volumes have been written about the permanent environmental damage that will impact our community if the proposed South Mountain Loop 202 Freeway is constructed on Pecos Road. This column will not restate all of the obvious environmental impacts; but will focus on the daily use of Pecos Road.

First, we can start with eliminating any thought of using Pecos Road for jogging or biking, as that will be strictly prohibited once it is part of the Interstate System.

Jim Jochim

Currently (as you will see in the accompanying map), we have six ways to access Pecos Road from the Ahwatukee Foothills Village — ranging from 40th Street on the east to 27th Avenue on the west. From my perspective, the traffic flows

at a decent pace on Pecos Road and the side streets that feed into the main exit locations are not overloaded.

The other accompanying map shows how the exit lo-

cations will look if the proposed South Mountain Loop 202 Freeway is completed. As you will quickly notice, we have decreased from six options to four. We have lost the ability to use 32nd Street and 27th Avenue.

This means the people living in the 700-plus homes in the Calabrea and Foothills Reserve HOAs will need to travel to 17th Avenue via Chandler Boulevard to get onto the South Mountain Loop 202 Freeway. In addition, all of the people who used 32nd Street will need to travel to either 40th Street or 24th Street if they want to gain access to the South Mountain Loop 202 Freeway. This will place a significant burden on Chandler Boulevard and also on interior streets like Liber-

ty Lane and Lakewood Parkway West — especially when Desert Vista High School is in session.

So this is a crucial time to donate money to Protecting Arizona's Resources and Children (PARC), a 501(c)(3) organization. We are in the process of filing a substantial opposition document with the Arizona Department of Transportation on the flaws in the Draft Environmental Impact Statement, and your tax deductible contribution will make a big difference. Please send your donation to: PARC, PO Box 50455, Phoenix, AZ 85076.

Thank you, for caring about our environment!

• Jim Jochim, treasurer of Protecting Arizona's Resources and Children (PARC), has been a resident of Ahwatukee Foothills since 1995.

CURRENT INTERSECTIONS ALONG PECOS ROAD

PECOS ROAD INTERSECTIONS ON PROPOSED LOOP 202 EXPANSION

Code	Issue	Response
1	Traffic	The main line of the E1 Alternative would not have a bicycle route as part of the design. Continuous east-west riding would be possible in the neighborhoods adjoining the alternative and along Chandler Boulevard. Please see Draft Environmental Impact Statement Figure 3-33, on page 3-57.
2	Traffic	<p>The determination to not include an interchange at 32nd Street was made in coordination with the City of Phoenix (see Figure 3-8 on page 3-15 of the Final Environmental Impact Statement). The 32nd Street interchange would have required the displacement of over 100 homes and would have been located in close proximity to an existing high school. The 27th Avenue interchange was evaluated but ultimately eliminated because of increased residential displacements and cost. The extension of Chandler Boulevard west of 19th Avenue is included in this project because reasonable access must be maintained to the neighborhoods at the west end of Pecos Road.</p> <p>In 2006, the City of Phoenix conducted a traffic circulation study to evaluate the impacts of the proposed freeway on the local street system, including the shift of access to Foothills Reserve and Calabrea from Pecos Road to Chandler Boulevard. The City study found no adverse effects on the local street system from the freeway (see Appendix 3-1 in the Final Environmental Impact Statement). The traffic information presented in the Draft Environmental Impact Statement in Figure 3-37 on page 3-61 shows that traffic along Chandler Boulevard between 24th Street and Interstate 10 would decrease with the propose freeway in place.</p>

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Code	Issue	Response
1	Traffic	Creating a truck bypass is not a goal of the proposed action. The proposed freeway is part of a transportation system developed to improve mobility in the region by increasing capacity and allowing traffic—including truck traffic—to access a segment of the “loop” system (see pages 1-21, 1-22, 3-1, and 3-3 of the Final Environmental Impact Statement) in the Phoenix metropolitan area. The proposed South Mountain Freeway would be a commuter corridor, helping to move local traffic. As with all other freeways in the region, trucks would use it for the through-transport of freight, for transport to and from distribution centers, and for transport to support local commerce. Nevertheless, the primary users of the proposed freeway would be automobiles. The Maricopa Association of Governments regional travel model projects that truck traffic will represent approximately 10 percent of the total traffic on the proposed action, similar to what is currently experienced on other regional freeways such as Interstate 10, Loop 101, and U.S. Route 60. Trucking destinations in the Phoenix metropolitan area would still prompt trucks to enter congested areas. Choosing to travel on the proposed freeway versus Interstate 10 would not produce substantial travel time benefits. Therefore, it is expected that “true” through truck traffic (not having to stop in the metropolitan area) would continue to use the faster, designated, and posted bypass system of Interstate 8 and State Route 85. The CANAMEX and Phoenix truck bypass (Interstate 8/State Route 85) routes are not mandatory for truck traffic; they are recommended. The Arizona Department of Transportation does not enforce these routes. It is not anticipated that these routes would be enforced as mandatory in the future.
2	Noise	Noise levels from Pecos Road traffic were measured in 2003 and 2004 and ranged from 44 A-weighted decibels to 56 A-weighted decibels. Without noise mitigation, noise levels from the proposed freeway are predicted to range from 64 A-weighted decibels to 78 A-weighted decibels at the nearest homes, depending on the distance from the freeway. Noise mitigation was estimated to reduce those noise levels to a range of 59 A-weighted decibels to 63 A-weighted decibels for most of the areas (see Draft Environmental Impact Statement page 4-91). Because of topography, local street traffic, or other engineering constraints in a few small areas, estimated noise levels could not be reduced as much and would be as high as 64 A-weighted decibels to 70 A-weighted decibels in those areas. Noise walls would range in height from 8 feet to 20 feet tall in the Ahwatukee Foothills area. Although not recognized by the Federal Highway Administration as mitigation, rubberized asphalt would be used as the top level of paving; it is discussed on Draft Environmental Impact Statement page 4-91 and in the sidebar on page 4-92. The noise analysis was updated for the Final Environmental Impact Statement using most recent Federal Highway Administration and Arizona Department of Transportation policy and traffic projections provided by the Maricopa Association of Governments in August 2013. This updated analysis begins on page 4-88 of the Final Environmental Impact Statement. No substantial differences between the analyses presented in the Draft and the Final Environmental Impact Statements resulted.

Code	Comment Document
	<p>appear in the DEIS. I'm sure the data is available, since as a long-term employee of a large local company, I had to fill out questionnaires regularly from the County on my commuting habits, including home address and destination.</p>
	<p>Regarding the pass-thru traffic of heavy semi trucks, I have noticed small signs on I-10E near Buckeye and I-10W near Casa Grande indicating that the AZ85 / I-8 route through Gila Bend is an optional bypass around the Phoenix urban core.</p>
5	<p>Having taken this route a few times, I noticed the number of traffic lights and stop signs, low speed limits, speed traps, lack of amenities, narrow lanes with few passing opportunities, scenic small downtown and difficult access to I-8 were a major disincentive for a commercial trucker to consider this alternate. I have been ensured by ADOT that this is all being remedied and AZ 85 will be an interstate caliber road by the time the SMF is completed, thus providing a much more feasible bypass alternative to the SMF. My question is if ADOT intends replace the current signage with larger, preferably overhead, signs, promoting the AZ85 / I-8 bypass in order to minimize pass-thru truck traffic on the SMF? In addition,</p>
1	<p>are there any plans to require or regulate the use of the Gila Bend bypass for pass thru traffic? If so, will there be enforcement by DPS, since commercial overland drivers all are required to maintain logs and carry bills of laden indicating origin and destination?</p>
	<p>Thank you for considering these numerous concerns and requests for more information regarding the SMF.</p>
	<p>Regards, Timothy R. Lank Vice President, Protecting Arizona's Resources and Children (PARC)</p>
	<p>Confidentiality and Nondisclosure Notice: This email transmission and any attachments are intended for use by the person(s)/entity(ies) named above and may contain confidential/privileged information. Any unauthorized use, disclosure or distribution is strictly prohibited. If you are not the intended recipient, please contact the sender by email, and delete or destroy all copies plus attachments.</p>

Code	Issue	Response
3	Air Quality	<p>The carbon monoxide analysis was updated in the Final Environmental Impact Statement. Although a qualitative analysis of particulate matter (PM₁₀) was presented in the Draft Environmental Impact Statement, a quantitative project-level particulate matter (PM₁₀) hot-spot analysis is included in the Final Environmental Impact Statement. The results of the air quality updates are summarized in the prologue to the Final Environmental Impact Statement (page xiii) and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement. The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones.</p> <p>The emission modeling developed for the proposed action showed that for the mobile source air toxics study area, there would be little difference in total annual emissions of mobile source air toxics emissions between the Preferred and No-Action Alternatives (less than a 1 percent difference) in 2025 and 2035. With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions (see discussion beginning on page 4-77 of the Final Environmental Impact Statement).</p>
4	Traffic	Information related to the origin and destination, including pass-thru, of vehicles that would use the proposed freeway is presented in Figure 3-18 on page 3-36 of the Draft Environmental Impact Statement. Details related to heavy trucks in the region is presented on page 3-64 of the Draft Environmental Impact Statement.
5	Trucks	There are no current plans to increase the size of the signs for the Phoenix bypass route but the current signs are overhead signs.

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Code	Issue	Response
1	Design	The design of the proposed freeway would be in accordance with the Arizona Department of Transportation Roadway Design Guidelines (see page 3-54 of the Draft Environmental Impact Statement). All freeways and highways in Arizona are developed these guidelines. Each freeway is evaluated based on surrounding site conditions and the design is optimized based on a number of criteria and considerations. There is not a single design that fits every condition. The proposed freeway would include similar opportunities for aesthetic treatments and enhancements as other freeways in the Phoenix metropolitan area.
2	General Impacts	<p>The study used state-of-the-practice, scientific community methods and similarly accepted methods. Methods, assumptions, and data were developed early in the environmental impact statement process and peer reviewed by the Federal Highway Administration, the Arizona Department of Transportation, and other federal, State, and local agencies. Peer reviewers concluded that the methods, assumptions, and data are appropriate. The Draft Environmental Impact Statement has sufficient technical merit, does comply with “fundamental concepts and purpose of an environmental impact statement,” and does appropriately and properly inform the public.</p> <p>While the City of Phoenix Police Department reported in 2005 that it did not have any statistics specific to crime adjacent to freeways, the Police Department did note that, based on its experience, there does not appear to be a correlation between crime rates and freeways. See Final Environmental Impact Statement sidebar on page 4-21.</p> <p>The Arizona Department of Transportation and Federal Highway Administration, in cooperation with the U.S. Army Corps of Engineers, the U.S. Bureau of Indian Affairs, and the Western Area Power Administration, prepared the Draft and Final Environmental Impact Statements and Section 4(f) Evaluation in accordance with the National Environmental Policy Act of 1969 [42 United States Code § 4332(2)(c)], Section 4(f) of the U.S. Department of Transportation Act of 1966 (49 United States Code § 303, as amended), and Section 404 of the Clean Water Act of 1977 (33 United States Code § 1251). All of these agencies are experienced in the review of National Environmental Policy Act documents and have found the logical sequence of decision making to be sound and in line with National Environmental Policy Act requirements. The Draft Environmental Impact Statement and Section 4(f) Evaluation 1) satisfies Federal Highway Administration and Arizona Department of Transportation’s environmental analysis requirements; 2) provides a comparison of the social, economic, and environmental impacts that may result from implementation of the proposed action—construction and operation of a major transportation facility; and 3) identifies measures to avoid, reduce, or otherwise mitigate adverse impacts.</p>
3	Air Quality	The carbon monoxide analysis was updated in the Final Environmental Impact Statement. Although a qualitative analysis of particulate matter (PM ₁₀) was presented in the Draft Environmental Impact Statement, a quantitative project-level particulate matter (PM ₁₀) hot-spot analysis is included in the Final Environmental Impact Statement. The results of the air quality updates are summarized in the prologue to the Final Environmental Impact Statement (page xiii) and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement. The carbon monoxide and particulate matter (PM ₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones.

Code	Comment Document
	roads creating traffic on small streets where there was none. Is there some good reason the design of the SMF is so drastically different from its predecessors? Even the most recent adjacent connecting Loop 202 San Tan Fwy has arterial overpasses.
4	Specifically, the design of the SMF in the eastern segment is deficient in that at is an above grade freeway with raised freeway overpasses over arterials, necessitating very high, unsightly noise walls and propagating pollution over an area loaded with nearby schools. This aspect of the design is largely unknown by the general public, who are expecting a design similar to what they see locally.
5	The SMF in the eastern segment is replacing Pecos Rd, which will be completely removed. However, access to the SMF in the form of interchanges will only have four versus the current six. The elimination of 32St and 27Ave access will wreak havoc with local traffic patterns on arterials, collectors and neighborhood streets. It has been stated that the 32St removal was at the request of the City of Phoenix because of concern over the four schools in the immediate area. This is a patently absurd argument. The removal of access to 32St will only cause worse traffic congestion and more dangerous conditions for local schoolchildren. This decision needs to be revisited with the appropriate Phoenix representative so he can reair his concerns and hear the ramifications of his irresponsible request.
6	The elimination of 27Ave access will divert traffic to the 17Ave interchange. Between 17 and 27 Ave is the largest piece of undeveloped land in Ahwatukee. When this area is developed at usual density, the traffic at the 17Ave interchange will increase tremendously, and the development will provide cut-thru traffic routes for vehicles currently using 27Ave. The elimination of an access point to the SMF at 27 Ave is a design deficiency that should be remedied. In addition, since the land between these two access points is undeveloped, an access road would be a helpful amenity.
7	A major safety issue with an above grade freeway is the proximity of approximately 12 miles of SRP 500KV high-tension power lines parallel and immediately adjacent to the roadway. With the expected high percentage of semi trucks on this route, and especially hazmat tankers carrying gasoline from the tank farm at the western end, an accident that involved one of these power poles could cause a cascade failure of the entire 12 mile stretch between dead end towers and cause an extended and expensive outage of weeks since this line carries most of the power to the East Valley. Furthermore, this is a major line from Palo Verde NGS and a sudden dropout could have severe repercussions for this facility. A below grade freeway would greatly reduce the chances of such an accident.
8	The traffic model data by HDR at the SMCAT meetings revealed some doubt about the need for commuter regional mobility between the Southeast Valley and

Code	Issue	Response
3 (cont.)		The emission modeling developed for the proposed action showed that for the mobile source air toxics study area, there would be little difference in total annual emissions of mobile source air toxics emissions between the Preferred and No-Action Alternatives (less than a 1 percent difference) in 2025 and 2035. With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions (see discussion beginning on page 4-77 of the Final Environmental Impact Statement).
4	Design	Depressing the proposed Pecos Road sections would entail installation of pump stations to drain the main line freeway. A depressed freeway would also need a drainage channel to capture the off-site flows to prevent their entering the freeway. Pump stations were not used because of the high cost of construction and maintenance needed for their operation. The recommended freeway configuration would have the E1 Alternative aboveground and the existing culverts extending to pass the drainage under the freeway. Pecos Road currently has numerous existing culvert crossings. Depressing the freeway in this area would eliminate the existing culvert crossings and potentially have adverse flooding impacts on adjacent properties. Extending the existing culverts or upsizing the culverts would maintain or improve drainage flows. This would ensure that there would be no adverse flooding impacts on adjacent properties. (See Draft Environmental Impact Statement pages 3-15 and 3-18.) To reduce impacts by depressing the proposed freeway in the Eastern Section, the Arizona Department of Transportation would: <ul style="list-style-type: none">• need to spend an additional \$400 million for right-of-way acquisition and construction• displace an additional 300 residences• maintain additional pump stations and detention basins for the life of the freeway• would still have noise-related impacts requiring mitigation (i.e., noise barriers and their associated costs and visual impacts) Because the belowground option would result in substantially greater costs and residential displacements, this option was eliminated from further study. A depressed freeway option was evaluated in the Draft Environmental Impact Statement and is described on pages 3-15 and 4-91. Although depressing the freeway would reduce noise levels, noise walls would still be needed to further reduce noise to meet the Arizona Department of Transportation noise policy. Whether the freeway is built aboveground with tall walls or belowground with shorter walls, the final mitigated noise levels would be nearly the same at nearby residences. The major disadvantage of building a depressed freeway would be the increased construction cost and the possible acquisition of additional right-of-way for pump stations and retention basins. For most alignments of each of the action alternatives, the proposed freeway would be elevated above the natural grade of the surrounding land. This elevated profile would allow noise to carry farther, creating noise impacts at greater distances from the freeway. Depressing the profile of the freeway below grade might reduce traffic noise levels adjacent to depressed sections. However, it would be necessary to also construct at-grade noise barriers to achieve noise reduction goals at receiver locations adjacent to depressed freeway sections (see page 4-91 in the Draft Environmental Impact Statement). This strategy would reduce visual impacts

(Response 4 continues on next page)

Code	Comment Document
9	<p>the Southwest Valley, especially eight lanes. What was not in doubt however, was the need for improved vehicle transportation between the Village of Laveen and the I-10 Papago Fwy. Throughout the process, many residents of Laveen commented that they didn't need the Ahwatukee segment, they just needed a better route to I-10 Papago. Many felt that future development in their area was being held hostage to a road half of which they didn't need or want. With this in mind, a spur freeway, improved arterials and / or an Arizona Parkway might be a better solution for the people of Laveen. The DEIS did not specifically cite commuter only traffic projections through the break point between the east and west segments of the SMF. This is an important piece of data.</p>
10	<p>Lastly, this SMF freeway is projected to cost out at \$2 - 3 billion. This money could more effectively be used improving the existing city core transportation infrastructure, such as widening the Broadway Curve and I-10 Papago Fwy, putting a second level on the Black Canyon Fwy, expanding critical arterials like Baseline Road or technology projects like improving traffic light coordination on arterials all around the Valley for increased flow. However, if the current proposed abominable design for the SMF eastern segment is based on decreased sales tax revenues due to the slow economy, I would like to suggest waiting until the funds are available to built it right.</p> <p>Thank you for considering these numerous concerns and requests for more information regarding the SMF.</p> <p>Regards, Timothy R. Lank Vice President, Protecting Arizona's Resources and Children (PARC)</p> <div></div> <div><div>Confidentiality and Nondisclosure Notice: This email transmission and any attachments are intended for use by the person(s)/entity(ies) named above and may contain confidential/privileged information. Any unauthorized use, disclosure or distribution is strictly prohibited. If you are not the intended recipient, please contact the sender by email, and delete or destroy all copies plus attachments.</div><div></div></div>

Code	Issue	Response
4 (cont.)		associated with high noise barriers on elevated freeways, but would entail ground-level noise barriers and their associated interference with views. Thus, with either approach to noise reduction, views of nearby mountains could be disrupted. The specific impacts would depend on the geometrics of the height of any noise barriers constructed, the intervening topography, and the distance of the barriers from the residences in question.
5	Alternatives	The determination to not include an interchange at 32nd Street was made in coordination with the City of Phoenix (see Figure 3-8 on page 3-15 of the Draft Environmental Impact Statement). The interchange would have required the displacement of over 100 homes and would have been located near an existing high school. The City recommended that, based on these impacts, the interchange be removed from the study. In 2006, the City of Phoenix conducted a traffic circulation study to evaluate the impacts of the proposed freeway on the local street system, including the shift of access to Foothills Reserve and Calabrea from Pecos Road to Chandler Boulevard. The City study found no adverse effects on the local street system from the freeway (see Appendix 3-1 in the Final Environmental Impact Statement).
6	Traffic	The determination to not include an interchange at 32nd Street was made in coordination with the City of Phoenix (see Figure 3-8 on page 3-15 of the Draft Environmental Impact Statement). The interchange was evaluated but ultimately eliminated because of increased residential displacements and cost. There are no provisions for frontage roads connecting 17th Avenue to the residential area to the west. Reasonable access is provided from 17th Avenue and the extension of Chandler Boulevard. The daily traffic volume on 17th Street in 2011 was approximately 4,500 vehicles per day just north of Pecos Road (see < http://phoenix.gov/streets/traffic/volumemap >). With the proposed freeway in place, an additional 4,000 vehicles day would use 17th Avenue to gain access to residences west of 17th Avenue. The total daily traffic would be well below the capacity of a two-lane road (approximately 15,000 vehicles per day).
7	Design	The clearance distance between the freeway and power lines would be in excess of any regulatory safety requirements for the power lines. There are power lines throughout the region that cross over sections of freeway. The Arizona Department of Transportation and the utility companies work together to ensure the safety of the traveling public as well as ensure reliability of power sources.

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8	Purpose and Need	The Federal Highway Administration and the U.S. Environmental Protection Agency approved the air quality conformity determination that includes the Maricopa Association of Governments regional travel demand model that produced the traffic projections used in the traffic analysis for the project (see Final Environmental Impact Statement page 3-27). The model projects demand for multiple modes of travel, including automobile, bus, and light rail. Key model inputs used to forecast travel demand in the Study Area included socioeconomic data (based on land use plans and population and economic forecasts), the anticipated average number of vehicle trips within the region on a daily basis, the distribution of transportation modes used by travelers in the region, the capacity of the transportation infrastructure to accommodate regional travel, and the future transportation infrastructure. The analyses in the Draft Environmental Impact Statement used socioeconomic and traffic projections at the regional analysis zone and traffic analysis zone levels. At the time of publication of the Draft Environmental Impact Statement, Census 2010-based socioeconomic data at the regional analysis zone and traffic analysis zone levels had not been adopted by the Maricopa Association of Governments and were not available to the project team. Therefore, the data used in the Draft Environmental Impact Statement were the most appropriate information available. The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. While new projections based on the 2010 Census showed a lower anticipated population in 2035 than the previous projections, the need for the freeway has not changed. The traffic analysis demonstrated that the proposed project is needed today.
9	Design	Information related to origins and destinations of motorists that would use the proposed freeway is presented in Figure 3-18 on page 3-36 of the Final Environmental Impact Statement. The definition of freeway users considers only those motorists who travel through the South Mountains; so, motorists who begin their trips in Ahwatukee Foothills Village and travel east to Interstate 10 (Maricopa Freeway) or motorists who begin in Laveen Village and travel north to Interstate 10 (Papago Freeway) are not counted in the analysis. The analysis of origins and destinations shows that 75 percent of travelers would be involved in trips beginning or ending in the Study Area or areas immediately surrounding it. Nine percent of the trips would begin, end, or begin and end outside of the Maricopa Association of Governments region; seven percent would either begin or end in Pinal County.
10	Purpose and Need	The proposed freeway was identified in the 2004 <i>Regional Transportation Plan</i> as one of a host of transportation improvements to meet the projected demand for transportation in the Phoenix metropolitan area. Many suggestions such as those made in the comment are being implemented, have been evaluated, or are being considered to address transportation needs in the Phoenix metropolitan area.

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Code	Issue	Response
1	Purpose and Need	<div><div>At the beginning of the environmental impact statement process, the need for a major transportation facility was reexamined to determine whether such a facility is still needed. Validation of those findings occurred throughout the entire environmental impact statement process. Analysis of the purpose and need for the proposed action followed National Environmental Policy Act and Federal Highway Administration implementing guidance on the subject matter and used state-of-the-practice analytical tools, as pointed out in Table 1-3, “Traffic Analysis Tools,” on page 1-13 of the Final Environmental Impact Statement. The results of the analysis determined that a transportation problem does exist and that problem will continue in the foreseeable future (see section, <i>Conclusions</i>, on page 1-21). As noted on page 3-1 in the section, <i>Reconfirm the Purpose and Need for the Proposed Action</i>, a continuous validation process was undertaken throughout the environmental impact statement process to ensure past conclusions in the environmental impact statement process remained valid.</div><div>The reader is referred to Final Environmental Impact Statement Chapter 3, <i>Alternatives</i>, and, specifically, the section, <i>Alternatives Development and Screening Process Conclusions</i>, beginning on page 3-26, noting “... a comprehensive set of alternatives including all modes was considered ... assurance that the screening process was an open process ... a logical, sequential, step-by-step process using data and expertise from multiple disciplines ...” to demonstrate all possibilities were considered.</div></div>

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2	<p>hour. They jump at any chance for any additional roads on the pretext that the new roads might reduce their aggravation and time sitting still in their cars. Well, this South Mountain Freeway is far from the answer to their complaints. But ADOT / MAG have been playing to this need with a false picture of relief based on old data and faulty models. If this involved anything other than a government agency, it would be called a gift. And their basic rationale is that it was put there 35 years ago. It completes a loop. And it's nice and symmetrical looking on a map, just like other large cities.</p> <p>If the SMF was completed even 25 years ago, there would have been little impact and little objection from the neighbors, since there were few people in the area at the time. In fact, our neighbors to the south, the Gila River Indian Community made several overtures expressing an interest in putting this road on their land, only to be spurned by government agencies that obviously had preplanned ideas of what this road needed to look like and where it needed to be. It is telling that of all the highways on the regional plan, the SMF was at the bottom of the list. That and the fact that this DEIS is straining so hard to try and justify it now indicate how ineffective it will be. Think what \$2.5 billion dollars would do if directly applied to the Broadway Curve, Papago Freeway, Baseline Road or an Arizona Parkway from Laveen to the Papago, for people who are being held hostage to the SMF under threat of denied development, when all they really want is their half of it. Better traffic controls, like timed coordinated traffic lights on major arterials, or a decent bus system that didn't cater to just downtown workers would a better allocation of transportation resources.</p> <p>Unresponsiveness to the needs of its citizen customers seems to be systemic at ADOT, the largest government agency in the state. Yet its single minded focus on ramming the misguided SMF through seems to be a dichotomy. It helps to look at some of their recent history for a better understanding of this iconoclast bureaucracy.</p> <p>For practically the entire 1990's, the westbound US 60 left lane merge onto the I-10E was the most hazardous location in the Valley for rear end collisions. In late afternoon, traffic backed up and stopped in the 65mph high-speed lane regularly caused major property damage and injury. An acquaintance alerted me to this when her boss, the owner of a large aerospace company, became concerned for his employee's safety and asked her to request information from ADOT on the frequency of collision occurrence. After much prodding and expressing fear for his job after looking at the results, an ADOT employee generated the report. The business owner wrote to ADOT asking what was planned to remedy the situation.</p>

Code	Issue	Response
2	Alternatives	<p>Tribal sovereignty is based on the inherent authority of Native American tribes to govern themselves. States have very limited authority over activities within tribal land (see Final Environmental Impact Statement page 2-1). The Arizona Department of Transportation and Federal Highway Administration do not have the authority to survey tribal land, make transportation determinations directly affecting tribal land, or condemn tribal land through an eminent domain process. While efforts to study project alternatives on Gila River Indian Community land were attempted (see Final Environmental Impact Statement Chapter 2, <i>Gila River Indian Community Coordination</i>), the Gila River Indian Community has long held a position of not allowing the proposed freeway to be located on its land. For example, a coordinated referendum of Gila River Indian Community members to favor or oppose construction of the proposed freeway on Gila River Indian Community land or to support a no-build option occurred in February 2012, and Gila River Indian Community members voted in favor of the no-build option. Moving forward, therefore, the proposed action cannot be located on the Gila River Indian Community (see Final Environmental Impact Statement page 3-25). The Gila River Indian Community's position regarding a "no-build" option was considered in the Draft and Final Environmental Impact Statement. That position is formally known as the No-Action Alternative and was evaluated in depth in assessments of the impacts of the proposed action on each resource. Whether alignments to develop on Gila River Indian Community land are ultimately identified or not, the Federal Highway Administration, Arizona Department of Transportation, and Maricopa Association of Governments will continue to coordinate with the Gila River Indian Community regarding concerns and potential mitigation for those concerns.</p>

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	<p>This local business leader got a very unsatisfying, if not lame response. I wrote to ADOT as well, suggesting flashing signs on the median wall warning of stopped traffic ahead, which I had seen on merging California interstate highways. I was told this was just not done here. This situation went on for over ten years with millions of dollars in damage and numerous injuries before a separate lane was created that fixed the problem. Ironically, all it took was some paint to stripe the new lane, but this hazardous situation had to wait years until a new carpool flyover was built. This is what passes for responsiveness, competence and accountability.</p> <p>A similar situation happened when the 101 Pima Freeway was opened. Initially, it was only four lanes with a dirt median and a two wire divider. A deadly crash occurred when a car went through the divider into oncoming traffic. This time, a direct order from the governor accelerated the necessary safety improvements. Another characteristic displayed here and on the SanTan 202 is the building of freeways in parts, a lane at a time, so to speak. The addition of another lane in each direction, then the addition of car pool HOV lanes seems designed to spread the pain out as long as possible. As an engineer and project manager, the efficiency and cost effectiveness of this process is questionable. One could also ask why the plans for the SMF call for it to have all eight lanes completed at once? What changed? Why were the previous roads built piecemeal?</p> <p>There are numerous other misfires I'm sure ADOT would just as soon forget about. The AZ51, originally designated the Piestewa (Squaw Peak) Parkway was actually partially built with signalized intersections at Thomas Road before the public realized what they were (not) getting and the outcry forced the immediate conversion to the present freeway. So much for the efficient propagation of highway information, much like the proposed design of the SMF, with its raised overpasses and unsightly huge sound walls.</p> <p>How much did the Paradise Parkway planning cost before it was quashed by Gov. Fife Symington? This road was also on the 1985 regional plan, had purpose and need, yet was quickly dropped for political reasons.</p> <p>SR 153 at Sky Harbor Airport was also on the regional plan. A huge expanse of elevated concrete, it was quietly decommissioned and the signs removed after an aborted attempt to transfer responsibility for completion to the City of Phoenix. Literally, a highway to nowhere.</p> <p>A question on the acquisition of ROW for the SMF. I understand there were very few takings for the 202 SanTan Fwy in Chandler and Gilbert. Yet hundreds of properties are required for the SMF. Why is there such a large difference?</p>

Code	Issue	Response
3	Design	The determination to build all eight lanes at once was based on a desire to minimize disruption to the traveling public. The other benefit is that there are existing high-occupancy vehicle lanes at each end of the proposed freeway (along State Route 202L [Santan Freeway] and Interstate 10 [Papago Freeway] that can be connected to provide additional services for commuters and regional bus transit). The region's freeways have been implemented in phases based on available funds and traffic demand.
4	Acquisitions and Relocations	The number of acquisitions when dealing with a major transportation project such as the proposed freeway is dependent on a number of factors—roadway location, density of development. The Santan Freeway (State Route 202L) was completed in 2006. At that time, the areas of Chandler and Gilbert were not as developed as the Ahwatukee Foothills Village area is today. Also the cities were more successful in preserving the right-of-way by limiting development within the proposed alignments. Conversely, many residences and businesses were acquired in the construction of the Red Mountain Freeway through the city of Mesa. In making decisions about these freeways, the Arizona Department of Transportation, with concurrence from the Federal Highway Administration, attempted to balance agency responsibilities to address regional mobility needs while being fiscally responsible and sensitive to local communities and environmental conditions. The identification of the W59/E1 Alternative as the Preferred Alternative (which includes the W59 Alternative in the Western Section of the Study Area) seeks to do the same.

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	<p>Not all ADOT's misdeeds are so earthshatteringly expensive. Many just require some paint and management direction to fix. I find them interesting because they shed light on the competency of this giant bureaucracy. A running joke almost everywhere in the Valley is the fact that all the new freeways are either called 101 or 202. If I say I'm on the 101, I could be in Glendale or Chandler, miles apart. Rather than continue with the more memorable different names for each segment, or even using different numbers, ADOT has given up on the names. Even the venerable Superstition Freeway has few signs left anymore. We may be calling this highway the South Mountain Freeway, but the chances are good it will just be another 202. This makes it very complicated and confusing to give directions or navigate.</p> <p>For years, there were daily jams and congestion where the 101 crosses over the Superstition Fwy. The overpass bridge was built wide enough, but the roadway constricted down to just two lanes in each direction, causing massive backups. Apparently, the Governor or some Legislator made a phone call, and someone appeared with a can of paint, added two more lanes and the backups disappeared. This begs the question whether ADOT goes back and audits its projects after completion to compare planned results with reality. The same situation currently exists on I-10E around MP165 where the freeway narrows to two lanes a few hundred meters before the off ramp for Queen Creek Rd. This is the main exit for the entire town of Maricopa and evening traffic regularly backs up to Chandler Blvd on I-10 because of it. The pavement is wide enough to add another lane, so another can of paint would fix this problem also. So much for ADOT concern for travel time and miles of congested highways. With the huge number of employees, does this organization even look for easy and cost effective improvements, or do they all take the bus and light rail?</p> <p>In a similar vein, I was at an ADOT local public meeting and asked why the I-10 couldn't be easily widened by one lane in each direction between Chandler Blvd and Elliott by using the extended merge/ exit lanes. Only a few yards of new additional pavement under each overpass would be required to complete the lane. Once again, the response was that's just not done here, and besides, it would defeat the purpose of the extended merge lanes. I pointed out that similar short on-ramps were in use on the I-17 downtown, but it was wasted breath. It made me wonder about the actual priority given to commuter travel time and receptiveness to public comments. This in a town where two major arterials have had clocked reversible lanes for years and the Valley is loaded with "suicide" center turn lanes. For comparison, in Honolulu, which has similar congestion problems, major urban core highways use the paved shoulders during peak traffic periods for several hours each day. Their priorities are definitely directed at their "customers" rather than</p>

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	<p>their department or jobs.</p> <p>Lastly, I decided to look at the internal workings and politics of this huge ADOT bureaucracy. This was inspired by an ADOT project engineer during one of the widenings of the Superstition Fwy in Tempe. Apparently, neighbors of the freeway had successfully fought ADOT to a negotiated peace where everyone agreed not to widen the freeway to its full ROW capacity due to noise and pollution concerns. The engineer's comment was in effect- these people won't be here forever and it will get widened to the limit soon enough. He was right. So much for concern for public health of the new neighbors.</p> <p>On the subject of subcontractor and project management, there were two investigative articles by Sarah Fenske of the Phoenix New Times newspaper in 2006 describing a sucessful lawsuit against ADOT by Tempe engineer Paul Braunstein, an ADOT subcontractor. The articles are quite revealing in a not very flattering way, describing cronyism and nepotism in the department in letting contracts, and organizational gyrations designed to offload accountability onto subcontractors. These articles are on the Internet at: http://www.phoenixnewtimes.com/2006-06-01/news/friends-at-work/ http://www.phoenixnewtimes.com/2006-06-22/news/roadkill/</p> <p>Although these articles are dated, there is no clear evidence that ADOT has changed. In fact, the \$20 million that ADOT paid HDR Engineering for this grossly deficient SMF DEIS, strongly suggest that things remain exactly the same. In light of all these anecdotes, I question the competency and motives of a department so keen on pushing a questionable \$100 million per mile road. This is especially true when the funds could be used so much more effectively practically anywhere else.</p> <p>Thank you for considering these numerous concerns and requests for more information regarding the SMF.</p> <p>Regards, Timothy R. Lank Vice President, Protecting Arizona Resources and Children (PARC)</p> <hr/> <p><small>Confidentiality and Nondisclosure Notice: This email transmission and any attachments are intended for use by the person(s)/entity(ies) named above and may contain confidential/privileged information. Any unauthorized use, disclosure or distribution is strictly prohibited. If you are not the intended recipient, please contact the sender by email, and delete or destroy all copies plus attachments.</small></p>

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Code	Comment Document
	<p>SAVE OUR MOUNTAINS FOUNDATION (SOMF): Official position on the Arizona Department of Transportation’s South Mountain Freeway Environmental Impact Study: May 20, 2013</p> <p>SOMF is against the alignment of the South Mountain Freeway and the 202 road that cuts into South Mountain and trespasses into the South Mountain Park/Preserve (SMPP). SOMF is not against the building of the freeway, we are against the encroachment of the freeway into the Preserve and the destruction of the south west ridges of South Mountain.</p> <p>SOMF anticipate successful negotiations with the Native American Communities to save the scared South Mountain.</p> <ul style="list-style-type: none">• South Mountain is the heart of the Phoenix Preserve system. At 16,600 acres it is the country’s largest park, later designated “Preserve” by Mayor Goddard, giving it higher protection. It is sacred to the Native American Communities, and is of significant life style value to the residents of Phoenix with over 3 million visitors each year.• The growth projections both for population and pollution shown in the DEIS are out of date and no longer valid.• The DEIS shows many alternate routes, but no alternative routes that would save cutting into the south west ridges of South Mountain.• The citizens of Phoenix have consistently voted 80% in favour of the Preserves, but ADOT feel able to ignore their vote, under the provision that a similar design was on the books prior to 1990. It is not in fact the same design, and PMPC believes that the ‘taking’ of 31.5 acres of Preserve land represents a clear conflict of the wishes of 80% of Phoenix voters.• SMPP is on the City of Phoenix “Historic Property Register”, and is eligible for protection under the NRHP (National Register of Historic Places). The DEIS says that the CCC buildings will not be destroyed, negating this requirement. However the Sonoran Desert features that make the Preserve unique will be damaged. Cuts of 220’ (the height of a 20 storey building) is massive, and the natural experience will be gravely diminished.• Section 6f of the ‘U.S. department of Transportation Act’ paragraph 1 says “NPS must ensure replacement of lands of equal value, location, and usefulness are provided as conditions of approval for land conversions”. It is NOT possible to replace pristine south west ridges of South Mountain, and 31.5 acres of Preserve. This provision can not be met.• Ch 5-18 of the DEIS states that “measures to minimize harm to the South Mountain resources determined through direct co-ordination with resource owners, stake holders and users...” SOMF as a stake holder has NOT be contacted by ADOT, and in fact there is no way to “minimize harm” when you are making 220’ cuts through 3 ridges of the South Mountain. There is no way that any land can compensate for the loss of 31.5 acres and the massive destruction to adjacent land.• Ch 4-1 of the DEIS lists “measurable benefits” of the Freeway Loop. It is notable that the negative impact has NOT been considered. <p>SOMF would like to list the “Measurable detriments” of cutting 220’ into SMPP with 8 lanes of traffic:</p> <ol style="list-style-type: none">1. Destruction of the south west ridges of a sacred mountain and important tourist destination for over 3 million visitors annually.2. A massive increase of traffic, pollution, noise and congestion within the Preserve boundary.

Code	Issue	Response
1	Alternatives	Tribal sovereignty is based on the inherent authority of Native American tribes to govern themselves. States have very limited authority over activities within tribal land (see Final Environmental Impact Statement page 2-1). The Arizona Department of Transportation and Federal Highway Administration do not have the authority to survey tribal land, make transportation determinations directly affecting tribal land, or condemn tribal land through an eminent domain process. While efforts to study project alternatives on Gila River Indian Community land were attempted (see Final Environmental Impact Statement Chapter 2, <i>Gila River Indian Community Coordination</i>), the Gila River Indian Community has long held a position of not allowing the proposed freeway to be located on its land. For example, a coordinated referendum of Gila River Indian Community members to favor or oppose construction of the proposed freeway on Gila River Indian Community land or to support a no-build option occurred in February 2012, and Gila River Indian Community members voted in favor of the no-build option. Moving forward, therefore, the proposed action cannot be located on the Gila River Indian Community (see Final Environmental Impact Statement page 3-25). The Gila River Indian Community’s position regarding a “no-build” option was considered in the Draft and Final Environmental Impact Statement. That position is formally known as the No-Action Alternative and was evaluated in depth in assessments of the impacts of the proposed action on each resource. Whether alignments to develop on Gila River Indian Community land are ultimately identified or not, the Federal Highway Administration, Arizona Department of Transportation, and Maricopa Association of Governments will continue to coordinate with the Gila River Indian Community regarding concerns and potential mitigation for those concerns.
2	Cultural Resources	If feasible, avoidance of Section 4(f) resources is always the Federal Highway Administration and Arizona Department of Transportation’s first option. As summarized in Figure 5-2 on page 5-4 of the Final Environmental Impact Statement, numerous alignment adjustments were made to avoid use of existing and planned Section 4(f) resources, like the South Mountains Traditional Cultural Property and Park/Preserve. As discussed on page 5-18 of the Final Environmental Impact Statement, many alternatives were examined to avoid the use of the South Mountains Traditional Cultural Property; however, none of these alternatives were deemed to be prudent and feasible by the Federal Highway Administration. The Department of the Interior reviewed the Draft Environmental Impact Statement and commented, “Following our review of the Section 4(f) Evaluation, we concur that there is no feasible or prudent alternative to the Preferred Alternative selected in the document, and that all measures have been taken to minimize harm to these resources. Please note however, that this concurrence is contingent upon successful completion of the Programmatic Agreement among the consulting parties.” (See Appendix 1-1 of the Final Environmental Impact Statement.)

Code	Comment Document
11	3. The inevitable death of wildlife, and destruction of wildlife corridors that make the Preserve unique. 4. South Mountain with a Freeway chopped into a corner of it, will NOT encourage companies to relocate to Phoenix, for its great life style and weather. This will be a negative to economic growth. 5. The Maricopa and Sun Circle Trails as a part of a larger County wide trail system, along with site specific trails will be negatively impacted by the freeway. "Having a regional trail system can be a stimulus to economic growth", as "Low impact Heritage Tourism", but not with a freeway cut through.
12	
13	
14	<ul style="list-style-type: none">DEIS "The commitment of resources necessary (\$2-3billion) to build and operate....based on the concept that residentswould benefit from the proposed transportation facility" <p>SOMF proposes that spending \$2-3 billion to desecrate a major tourist and recreation attraction at the heart of the Preserve system would NOT be of any benefit to the residents of Phoenix.</p> <p>Save Our Mountains Foundation is a Phoenix based non profit formed in 1973 by concerned citizens. SOMF is dedicated to facilitating the improvement of the mountain and desert preserves in Phoenix.</p> <p>We anticipate successful negotiations with the Native American Communities to save the sacred South Mountain.</p>

Code	Issue	Response
2 (cont.)		City of Phoenix planning efforts since the mid-1980s illustrate an awareness of the potential for the proposed freeway to affect Phoenix South Mountain Park/ Preserve. In 1989, the South Mountain Park Master Plan was adopted by the Phoenix City Council. The master plan shows the freeway alignment as adopted by the State Transportation Board in 1988. In 1990, the South Mountain Preserve Act was ratified by the Arizona Legislature. The Act did not apply to roadways through a designated mountain preserve if the roadway was in the State Highway System prior to August 15, 1990. The proposed freeway was in the State Highway System prior to 1990. Records prior to the Act suggest a primary reason for the exception was to allow the proposed freeway to go through Phoenix South Mountain Park/ Preserve (see Final Environmental Impact Statement page 5-14).
3	Traffic	<p>The analyses in the Draft Environmental Impact Statement used socioeconomic and traffic projections at the regional analysis zone and traffic analysis zone levels. At the time of publication of the Draft Environmental Impact Statement, Census 2010-based socioeconomic data at the regional analysis zone and traffic analysis zone levels had not been adopted by the Maricopa Association of Governments and were not available to the project team. Therefore, the data used in the Draft Environmental Impact Statement were the most appropriate information available.</p> <p>The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future.</p> <p>If the proposed action is the Selected Alternative in the record of decision, planning for emergency situations would be initiated.</p>
4	Alternatives	Several action alternatives were subject to the alternatives development and screening process; not just the E1 Alternative and alternatives located on the Gila River Indian Community (Figure 3-6 on page 3-10 of the Final Environmental Impact Statement illustrates a representation of such alternatives). Ultimately the other alternatives were eliminated from further study in the screening process and the Gila River Indian Community decided not to give permission to study alternatives on its land (see Final Environmental Impact Statement page 3-25). Therefore, the Arizona Department of Transportation, with concurrence from Federal Highway Administration, identified the E1 Alternative as the eastern section of the Preferred Alternative (which includes the W59 Alternative in the Western Section of the Study Area). In reaching its determination, the Arizona Department of Transportation sought to balance its responsibilities to address regional mobility needs while being fiscally responsible and sensitive to local communities.
5	Section 4(f) and Section 6(f)	A discussion of the Phoenix Mountain Preserve Act and the proposed freeway is provided on page 5-14 of the Draft Environmental Impact Statement. The total area of impact to the South Mountain Park/Preserve has been reduced from what was proposed in 1988 (see Figure 5-14 on page 5-23 of the Draft Environmental Impact Statement).

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6	Section 4(f) and Section 6(f)	<p>Section 106 of the National Historic Preservation Act requires a government-to-government relationship between the Federal Government and Indian tribes as described beginning on page 4-140 of the Final Environmental Impact Statement. Section 106 requires that federal agencies take into account the effects of their undertakings on historic properties. This process requires consultation with tribal authorities. Consultation has occurred with Gila River Indian Community government officials, the Tribal Historic Preservation Officer, the Cultural Resource Management Program, many different tribal authorities, and the State Historic Preservation Office. The consultation has resulted in concurrence from the Gila River Indian Community Tribal Historic Preservation Office and the State Historic Preservation Office on National Register of Historic Places eligibility recommendations (including traditional cultural properties), project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until any commitments in a record of decision are completed. Sometimes there is no way for a needed project to proceed without harming Section 4(f) properties (such as the South Mountain Park/Preserve). As described in the Draft Environmental Impact Statement in Chapters 2, 3, and 5, the examination of possible avoidance alternatives was robust and arduous. The Draft Environmental Impact Statement acknowledges that the cuts through the South Mountains would be a substantial impact, but the activities that make the park such a highly valued tourist attraction (recreational activities, interaction with the Sonoran Desert) would remain.</p> <p>If feasible, avoidance of Section 4(f) resources is always the Federal Highway Administration and Arizona Department of Transportation's first option. As summarized in Figure 5-2 on page 5-4 of the Draft Environmental Impact Statement, numerous alignment adjustments were made to avoid use of existing and planned Section 4(f) resources; however, none of these alternatives were deemed to be prudent and feasible by the Federal Highway Administration. The Department of the Interior reviewed the Draft Environmental Impact Statement and commented, "Following our review of the Section 4(f) Evaluation, we concur that there is no feasible or prudent alternative to the Preferred Alternative selected in the document, and that all measures have been taken to minimize harm to these resources. Please note however, that this concurrence is contingent upon successful completion of the Programmatic Agreement among the consulting parties." (See Appendix 1-1 of the Final Environmental Impact Statement.)</p>
7	Section 4(f) and Section 6(f)	<p>Section 6(f) of the Land and Water Conservation Fund Act pertains to projects that would impact outdoor recreational property acquired with Land and Water Conservation Fund Act funds. All Section 6(f) protected areas would be avoided and therefore, this requirement would not apply. Other aspects of the South Mountains are afforded protection under Section 4(f) (see page 5-1 of the Final Environmental Impact Statement).</p>
8	Section 4(f) and Section 6(f)	<p>It is acknowledged that the Save Our Mountains Foundation was not one of the groups that has historically been solicited for feedback on potential measures to minimize harm. Every reasonable attempt is made to ensure all stakeholders are engaged; Chapter 6 details the comprehensive public and agency outreach undertaken for a project that had more news articles than most other stories in Arizona since 2001 to ensure all stakeholders would be engaged. The Draft Environmental Impact Statement comment period serves as an opportunity for all stakeholders to provide input on potential measures.</p>

(Responses continue on next page)

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9	Impacts	Impacts of the proposed freeway are disclosed throughout the Draft Environmental Impact Statement. The <i>Environmental Consequences</i> sections in Chapter 4 describe the impacts of each action alternative studied in detail with respect to each environmental element. In the <i>Summary</i> chapter, Table S-3 beginning on page S-10 of the Draft Environmental Impact Statement provides a tabular list of all of the impacts associated with the proposed freeway.
10	Section 4(f) and Section 6(f)	<p>If feasible, avoidance of Section 4(f) resources is always the Federal Highway Administration and Arizona Department of Transportation’s first option. As summarized in Figure 5-2 on page 5-4 of the Final Environmental Impact Statement, numerous alignment adjustments were made to avoid use of existing and planned Section 4(f) resources, like the South Mountains Traditional Cultural Property and Park/Preserve. The activities that make the park such a highly valued tourist attraction (recreational activities, interaction with the Sonoran Desert) would remain. As discussed on page 5-18 of the Final Environmental Impact Statement, many alternatives were examined to avoid the use of the South Mountains Traditional Cultural Property; however, none of these alternatives were deemed to be prudent and feasible by the Federal Highway Administration. The Department of the Interior reviewed the Draft Environmental Impact Statement and commented, “Following our review of the Section 4(f) Evaluation, we concur that there is no feasible or prudent alternative to the Preferred Alternative selected in the document, and that all measures have been taken to minimize harm to these resources. Please note however, that this concurrence is contingent upon successful completion of the Programmatic Agreement among the consulting parties.” (See Appendix 1-1 of the Final Environmental Impact Statement.)</p> <p>City of Phoenix planning efforts since the mid-1980s illustrate an awareness of the potential for the proposed freeway to affect Phoenix South Mountain Park/Preserve. In 1989, the South Mountain Park Master Plan was adopted by the Phoenix City Council. The master plan shows the freeway alignment as adopted by the State Transportation Board in 1988. In 1990, the South Mountain Preserve Act was ratified by the Arizona Legislature. The Act did not apply to roadways through a designated mountain preserve if the roadway was in the State Highway System prior to August 15, 1990. The proposed freeway was in the State Highway System prior to 1990. Records prior to the Act suggest a primary reason for the exception was to allow the proposed freeway to go through Phoenix South Mountain Park/Preserve (see Final Environmental Impact Statement page 5-14).</p>

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11	Biological Resources	<p>The section, <i>General Impacts on Vegetation, Wildlife, and Wildlife Habitat</i>, beginning on page 4-125 of the Draft Environmental Impact Statement, discloses by what means the proposed action and its alternatives would affect vegetation, wildlife, and wildlife habitat. A Biological Evaluation was submitted to the U.S. Fish and Wildlife Service, Arizona Game and Fish Department, and Gila River Indian Community Department of Environmental Quality that addressed threatened, endangered, and candidate species,. The information used to prepare the analysis in the Draft Environmental Impact Statement (page 4-122) was based on 2011 information retrieved from the Arizona Game and Fish Department (Gopherus agassizii, draft unpublished abstract compiled and edited by the Heritage Data Management System, Phoenix). Current information on threats and connectivity strategies was included in the Biological Evaluation. The U.S. Fish and Wildlife Service concurred with the species determinations in the Biological Evaluation (see Appendix 1-1 of the Final Environmental Impact Statement).</p> <p>Connectivity is planned to allow wildlife movement beneath the freeway in multiuse crossings (see page 4-125 of the Draft Environmental Impact Statement). The Federal Highway Administration and Arizona Department of Transportation have committed to providing mitigation by including multifunctional crossing structures designed for wildlife and for limited human use as well as culverts designed for connectivity for smaller species. Wildlife-friendly design information would be considered during the design of drainage and crossing structures for the freeway (see <i>Mitigation</i>, beginning on page 4-138 of the Final Environmental Impact Statement).</p>
12	Economic Impacts	Comment noted.
13	Section 4(f) and Section 6(f)	The Maricopa County trails that would cross the freeway are noted in Figure 5-5 on page 5-9 of the Final Environmental Impact Statement. As noted in the table, the freeway would cross over each trail and no direct impacts would occur. This condition is not uncommon as there are numerous local and regional trails throughout the Phoenix metropolitan area that cross freeways. The proposed freeway would not incorporate land from the Section 4(f) resource, and would have no proximity impacts so severe that the protected activities, features, or attributes that qualifies the trails for protection under Section 4(f) are substantially impaired.
14	Purpose and Need	Providing a new freeway in an area where it would not be fully used would be an unwise expenditure of public funds. Of the projected 51 percent increase in population, 31 percent increase in housing units, and 69 percent increase in jobs between 2010 and 2035, nearly half of these increases are expected in areas that would be immediately served by the proposed freeway (see Final Environmental Impact Statement page 1-21). When the Arizona Department of Transportation determines whether a freeway should be built, the agency must consider numerous factors, including local and regional transportation needs, project costs, and environmental considerations. Decisions regarding freeway projects are based on the transportation needs of the entire Phoenix metropolitan area as part of a comprehensive, multimodal, regional approach. The proposed freeway is a major component in the Regional Freeway and Highway System. Additionally, the proposed freeway is an important component of past and current planning efforts. Maricopa County, Phoenix's villages (Laveen, Estrella, and Ahwatukee Foothills), Tolleson, and Avondale have all made transportation, land use, and economic planning decisions in a context of the proposed freeway operating in the Study Area. Finally, the proposed freeway would function as intended in the <i>Regional Transportation Plan</i> .

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	<div>4211</div> <div><div><div>1Outdated data projections used, based on</div><div>2outdated date projections that are now six to eight</div><div>3years old. In all the studies, the DEIS provides no</div><div>4alternative analysis to the demolition of the</div><div>5southwest ridge. Over 3 million visitors come to</div><div>6South Mountain Park Preserve annually.</div><div>7THE FACILITATOR: Excuse me, Ms. Lakin.</div><div>8MS. LAKIN: Destroying any part of the</div><div>9mountain to allaying a high-capacity freeway will</div><div>10only have a negative impact on tourism, and the many</div><div>11unique resources. We are not against this freeway,</div><div>12we are against going through South Mountain Preserve.</div><div>13Thank you.</div><div>14THE FACILITATOR: Thank you, Ms. Lakin.</div><div>15We'll now proceed with the</div><div>16non-pre-registered folks.</div><div>17One more comment before we continue. For</div><div>18those of you who see your name on the screen, if</div><div>19you're in the back parts of the room, if you want to</div><div>20make your way up to get people to either microphone,</div><div>21that will help us through the day. Feel free to move</div><div>22up. At this point Suzanne Rothwell.</div><div>23Thank you.</div><div>24MS. ROTHWELL: Good morning. Thank you</div><div>25for the opportunity to speak. Is this working? No.</div></div><div>Page 10</div><div>Driver and Nix Court Reporters - (602) 266-6525 www.drivernix.com</div></div>

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Code	Comment Document
1	<p>1 Well, don't worry, I have a loud voice.</p> <p>2 I represent Save Our Mountains</p> <p>3 Foundation. And I have an official statement that</p> <p>4 I've sent to you via your e-mail source. But I</p> <p>5 wanted to stand here today and say that we are</p> <p>6 opposed to any cutting through the South Mountain</p> <p>7 Park Preserve. We are opposed to any taking of the</p> <p>8 Phoenix Mountain Preserve System.</p> <p>9 And I think perhaps the DEIS, which is a</p> <p>10 long and wordy document, is most deficient in what it</p> <p>11 doesn't say. Well, it's most obvious by what it</p> <p>12 doesn't say. And it does say that this is going to</p> <p>13 be an economic benefit to Phoenix. But what it</p> <p>14 doesn't say is that Phoenix has companies relocating</p> <p>15 here, people coming to live here because of our</p> <p>16 beautiful weather and our outdoor lifestyle. And if</p> <p>17 you take away the heart of our preserve system by</p> <p>18 chopping into the southwest reaches of South Mountain</p> <p>19 Park, we believe that will be a huge negative.</p> <p>20 We've got the Maricopa Trail, Sun Circle</p> <p>21 Trail, and other local trails in that area. In your</p> <p>22 document you say that within a quarter of a mile it</p> <p>23 will be impacted, anything more than outside of a</p> <p>24 quarter of a mile will not be impacted. As a hiker</p> <p>25 myself, I can tell you that's not true. And who will</p> <p>Page 11</p> <p>Driver and Nix Court Reporters - (602) 266-6525 www.drivernix.com</p>

Code	Issue	Response
1	Section 4(f) and Section 6(f)	City of Phoenix planning efforts since the mid-1980s illustrate an awareness of the potential for the proposed freeway to affect Phoenix South Mountain Park/ Preserve. In 1989, the South Mountain Park Master Plan was adopted by the Phoenix City Council. The master plan shows the freeway alignment as adopted by the State Transportation Board in 1988. In 1990, the South Mountain Preserve Act was ratified by the Arizona Legislature. The Act did not apply to roadways through a designated mountain preserve if the roadway was in the State Highway System prior to August 15, 1990. The proposed freeway was in the State Highway System prior to 1990. Records prior to the Act suggest a primary reason for the exception was to allow the proposed freeway to go through Phoenix South Mountain Park/ Preserve (see Final Environmental Impact Statement page 5-14). The project team examined alternatives to avoid the park, but did not identify any feasible and prudent alternatives to avoid impacts. The portion of the park that would be used for the proposed freeway would be 31.3 acres, or approximately 0.2 percent of the park's approximately 16,600 acres (see Final Environmental Impact Statement pages S-39 and 5-31). The activities that make the park such a highly valued tourist attraction (recreational activities, interaction with the Sonoran Desert) would remain. The Arizona Department of Transportation continues to work with park stakeholders to minimize impacts and address concerns. Measures to minimize harm to the park were developed (see the Final Environmental Impact Statement, starting on page 5-23). Therefore, the proposed freeway is consistent with regional planning efforts.
2	Section 4(f) and Section 6(f)	The Maricopa County trails that would cross the freeway are noted in Figure 5-5 on page 5-9 of the Final Environmental Impact Statement. As noted in the table, the freeway would cross over each trail and no direct impacts would occur. This condition is not uncommon as there are numerous local and regional trails throughout the Phoenix metropolitan area that cross freeways. The proposed freeway would not incorporate land from the Section 4(f) resource, and would have no proximity impacts so severe that the protected activities, features, or attributes that qualifies the trails for protection under Section 4(f) are substantially impaired.

Code	Comment Document
3	<div><p>1 want to go hike in a park where there's a huge</p><p>2 eight-lane freeway cut through the southwest region.</p><p>3 So Save Our Mountains Foundation would</p><p>4 like to encourage you, and whoever in the state needs</p><p>5 to make this happen, to negotiate better with the</p><p>6 Gila River Indian community and the Indian community</p><p>7 at large, and we hope that they will also come to the</p><p>8 table to talk, and that we can make a freeway happen</p><p>9 where it doesn't chop into the preserve and part of</p><p>10 what forms a crown and glory for the City of Phoenix.</p><p>11 We don't have oceans, we don't have beaches, but we</p><p>12 do have a beautiful preserve system.</p><p>13 Thank you very, very much.</p><p>14 THE FACILITATOR: Thank you,</p><p>15 Ms. Rothwell.</p><p>16 Michael Goodman.</p><p>17 MR. GOODMAN: Thank you. I'm Michael</p><p>18 Goodman. I'm also with the Phoenix Mountains</p><p>19 Preservation Council, and I am a member of the ADOT</p><p>20 Citizens Advisory Team. Pretty much I agree with</p><p>21 what has already been said, so I'll be pretty brief.</p><p>22 I did finish reading the EIS, and with regards to the</p><p>23 E-1 section, I was highly disappointed. I know</p><p>24 during the so-called 12 years we've been studying</p><p>25 this, we had a number of reports, I guess the E-1 was</p></div> <div><p>Page 12</p><p>Driver and Nix Court Reporters - (602) 266-6525</p><p>www.drivernix.com</p></div>

Code	Issue	Response
3	Alternatives	<p>Tribal sovereignty is based on the inherent authority of Native American tribes to govern themselves. States have very limited authority over activities within tribal land (see Final Environmental Impact Statement page 2-1). The Arizona Department of Transportation and Federal Highway Administration do not have the authority to survey tribal land, make transportation determinations directly affecting tribal land, or condemn tribal land through an eminent domain process. While efforts to study project alternatives on Gila River Indian Community land were attempted (see Final Environmental Impact Statement Chapter 2, <i>Gila River Indian Community Coordination</i>), the Gila River Indian Community has long held a position of not allowing the proposed freeway to be located on its land. For example, a coordinated referendum of Gila River Indian Community members to favor or oppose construction of the proposed freeway on Gila River Indian Community land or to support a no-build option occurred in February 2012, and Gila River Indian Community members voted in favor of the no-build option. Moving forward, therefore, the proposed action cannot be located on the Gila River Indian Community (see Final Environmental Impact Statement page 3-25). The Gila River Indian Community's position regarding a "no-build" option was considered in the Draft and Final Environmental Impact Statement. That position is formally known as the No-Action Alternative and was evaluated in depth in assessments of the impacts of the proposed action on each resource. Whether alignments to develop on Gila River Indian Community land are ultimately identified or not, the Federal Highway Administration, Arizona Department of Transportation, and Maricopa Association of Governments will continue to coordinate with the Gila River Indian Community regarding concerns and potential mitigation for those concerns.</p>

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	<div>4216</div> <div><div><div>1 built unless there is a sidewalk or a trail for</div><div>2 pedestrian and bike traffic next to it, so a person</div><div>3 should be able to travel any way you can. Now is the</div><div>4 time to make that possible.</div><div>5 In closing, I ask that we build the road</div><div>6 now. 30 years is long enough and as we all know,</div><div>7 costs have gone up substantially and will continue to</div><div>8 rise with each day, week, month, year, or, in this</div><div>9 case, three decades, we wait.</div><div>10 When first proposed, it was with the</div><div>11 future needs in mind. Well, the future has arrived.</div><div>12 It is time to act. We cannot wait any longer.</div><div>13 Thank you very much. I appreciate you</div><div>14 listening.</div><div>15 THE FACILITATOR: Thank you, Mr. Mockus.</div><div>16 Just one note. For those of you who are,</div><div>17 I understand it's very difficult sometimes in working</div><div>18 with prepared notes to keep in mind the time here.</div><div>19 So if you would, from time to time, if you are</div><div>20 working from notes, please take time out to</div><div>21 double-check the time. You're doing a great job and</div><div>22 we appreciate that. Thank you.</div><div>23 Sandy Bahr.</div><div>24 MS. BAHR: Thank you. My name is Sandy</div><div>25 Bahr. I'm the chapter director for the Sierra Club</div></div><div>Page 16</div><div>Driver and Nix Court Reporters - (602) 266-6525 www.drivernix.com</div></div>

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1	<p>1 here in Arizona. And we will be submitting detailed</p> <p>2 written comments, but I wanted to say a few things</p> <p>3 this morning.</p> <p>4 First of all, we are strongly opposed to</p> <p>5 construction of this freeway and support the no-build</p> <p>6 option. No-build, as we've said repeatedly for many</p> <p>7 years, I don't know if it's been 30, but pretty close</p> <p>8 to it, no-build doesn't mean no action. We should be</p> <p>9 investing in existing infrastructure, which has been</p> <p>10 in dire need of it, and in more mass transit options.</p> <p>11 Phoenix doesn't need another freeway.</p> <p>12 As proposed, as you have heard, as you</p> <p>13 know, this project would destroy a portion of South</p> <p>14 Mountain Park, which is a key component of our</p> <p>15 community. It would exacerbate air pollution,</p> <p>16 destroy wildlife and wildlife habitat and exacerbate</p> <p>17 urban sprawl. It was a bad idea 30 years ago; it's a</p> <p>18 bad idea today. There are many other issues with</p> <p>19 construction of this freeway. Increased traffic and</p> <p>20 traffic congestion. We all know freeways give you</p> <p>21 just a little bit of respite, and before you know it,</p> <p>22 they're even more congested. And if it does what</p> <p>23 some people said it is supposed to do and brings more</p> <p>24 trucks in instead of taking 85, we'll have even more</p> <p>25 congestion and more pollution in the Phoenix area,</p>
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Code	Issue	Response
1	Purpose and Need	As stated on page 3-40 of the Final Environmental Impact Statement, the No-Action Alternative would not satisfy the purpose and need of the proposed action because it would result in further difficulty in gaining access to adjacent land uses, increased difficulty in gaining access to Interstate and regional freeway systems from the local arterial street network, increased levels of congestion-related impacts, continued degradation in performance of regional freeway-dependent transit services, increased trip times, and higher user costs. Further, the No-Action Alternative would be inconsistent with Maricopa Association of Governments' and local jurisdictions' long-range planning and policies. The No-Action Alternative was included in the Draft and Final Environmental Impact Statements for detailed study to compare impacts of the action alternatives with the consequences of doing nothing (impacts can result from choosing to do nothing).
2	Section 4(f) and Section 6(f)	The proposed freeway would pass through the park's southwestern edge. Section 4(f) of the Department of Transportation Act extends protection to significant publicly owned public parks, recreation areas, and wildlife and waterfowl refuges, as well as significant historic sites, whether they are publicly or privately owned. This protection stipulates that those facilities can be used for transportation projects only if there is no prudent and feasible alternative to using the land and the project includes all possible planning to minimize harm to the land [see Final Environmental Impact Statement, Chapter 5, <i>Section 4(f) Evaluation</i>].The project team examined alternatives to avoid the Phoenix South Mountain Park/Preserve, but did not identify any feasible and prudent alternatives to avoid impacts on the park. As such, the freeway would go through the park's southwestern limits. The Arizona Department of Transportation continues to work with park stakeholders to minimize impacts and address concerns. Measures to minimize harm to the park were developed (see Final Environmental Impact Statement, starting on page 5-23). The portion of the park that would be used for the proposed freeway would be 31.3 acres, or approximately 0.2 percent of the park's approximately 16,600 acres (see Final Environmental Impact Statement pages S-39 and 5-31). Phoenix South Mountain Park/Preserve would remain the largest municipally owned park in the United States. The activities that make the park a highly valued resource (recreational activities, interaction with the Sonoran Desert) would remain. Nine-tenths of a mile of the proposed freeway would pass through the park's southwestern edge (see Final Environmental Impact Statement page 5-13).
3	Air Quality	The Final Environmental Impact Statement addresses the history of air quality in the region (see text beginning on page 4-68 of the Final Environmental Impact Statement). The Clean Air Act § 109(b)(1) requires the U.S. Environmental Protection Agency to promulgate primary National Ambient Air Quality Standards at levels that allow an adequate margin of safety to protect the public health. Air quality in the Phoenix metropolitan area has improved over time; Phoenix was redesignated to attainment/maintenance for carbon monoxide in 2005, and the U.S. Environmental Protection Agency recently determined that Phoenix has attained the particulate matter (PM ₁₀) standard. These improvements are largely associated with cleaner fuels and lower-emission vehicles along with local controls on fugitive dust. Future emissions would also be reduced by the use of cleaner burning fuels, technological advances in automotive design (including the greater use of alternative fuel vehicles), reformulated gasoline, gas can standards, stricter enforcement of emission standards during inspections, heavy-duty diesel engine and on-highway diesel sulfur control programs, dust control programs, and others.

(Response 3 continues on next page)

Code	Comment Document
7	<div><p>1 which already has unhealthy air for particulates and</p><p>2 ozone. And transportation is a key component of both</p><p>3 of those pollutants.</p><p>4 The other thing that I wanted to mention</p><p>5 is that in not looking at some of these alternatives,</p><p>6 you really have failed to evaluate the full range of</p><p>7 reasonable alternatives. This freeway was something</p><p>8 that ADOT has wanted to do, MAG has wanted to do, and</p><p>9 no matter how many facts are presented, no matter how</p><p>10 much information is presented, that it's a bad idea,</p><p>11 that it no longer serves the purpose that it was</p><p>12 intended to serve, you just keep pushing forward with</p><p>13 it.</p><p>14 We encourage rejecting this freeway,</p><p>15 going back to the drawing board, and looking at</p><p>16 investing our hard-earned tax dollars in alternatives</p><p>17 that will work for our community and for future</p><p>18 generations of Arizonans.</p><p>19 So thank you very much. And we'll be</p><p>20 presenting more detailed written comments.</p><p>21 THE FACILITATOR: Thank you, Ms. Bahr.</p><p>22 David Gironda. Did I pronounce that</p><p>23 correctly?</p><p>24 MR. GIRONDA: Gironda. And I do have a</p><p>25 written statement which I can give to the recorder to</p></div> <div><p>Page 18</p><p>Driver and Nix Court Reporters - (602) 266-6525</p><p>www.drivernix.com</p></div>

Code	Issue	Response
3 (cont.)		<p>The air quality assessment for the proposed freeway analyzed impacts from carbon monoxide and particulate matter (PM₁₀) and followed U.S. Environmental Protection Agency guidelines. The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones. For mobile source air toxics, the analysis showed that for the Study Area, constructing the freeway would have a marginal effect on annual emissions in 2025 and 2035 (less than a 1 percent difference in total annual emissions between the Preferred Alternative and No-Action Alternative). With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions. The air quality analyses were updated for the Final Environmental Impact Statement, including a quantitative particulate matter (PM₁₀) analysis, and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement.</p> <p>Congestion relief resulting from the proposed freeway would provide localized air quality emissions reductions on area freeways and arterial streets and at interchanges, benefiting users of area highways and those living near congested roads.</p>
4	Biology, Plants, and Wildlife	<p>The section, <i>General Impacts on Vegetation, Wildlife, and Wildlife Habitat</i>, beginning on page 4-125 of the Draft Environmental Impact Statement, discloses by what means the proposed action and its alternatives would affect vegetation, wildlife, and wildlife habitat. A Biological Evaluation was submitted to the U.S. Fish and Wildlife Service, Arizona Game and Fish Department, and Gila River Indian Community Department of Environmental Quality that addressed threatened, endangered, and candidate species,. The information used to prepare the analysis in the Draft Environmental Impact Statement (page 4-122) was based on 2011 information retrieved from the Arizona Game and Fish Department (Gopherus agassizii, draft unpublished abstract compiled and edited by the Heritage Data Management System, Phoenix). Current information on threats and connectivity strategies was included in the Biological Evaluation. The U.S. Fish and Wildlife Service concurred with the species determinations in the Biological Evaluation (see Appendix 1-1 of the Final Environmental Impact Statement).</p> <p>Connectivity is planned to allow wildlife movement beneath the freeway in multiuse crossings (see page 4-137 of the Final Environmental Impact Statement). The Federal Highway Administration and Arizona Department of Transportation have committed to providing mitigation by including multifunctional crossing structures designed for wildlife and for limited human use as well as culverts designed for connectivity for smaller species. Wildlife-friendly design information would be considered during the design of drainage and crossing structures for the freeway (see <i>Mitigation</i>, beginning on page 4-138 of the Final Environmental Impact Statement).</p>

Code	Comment Document

Code	Issue	Response
5	Urban Sprawl	Unplanned growth is often termed “urban sprawl.” Generally, this term is used in the context of rapid and uncontrolled urban growth onto previously undeveloped land—usually on the outskirts of an existing urban area. Projects like the proposed freeway are often identified as contributors to urban sprawl. Freeway projects are often cited as making land at the urban fringe more accessible and, therefore, more attractive for development. However, examination of data comparing population and land use between 1975 and 2000 suggests major transportation projects like the proposed freeway do not induce growth in the region (see Final Environmental Impact Statement pages 4-170 through 4-174). The proposed freeway would be implemented in a historically quickly urbanizing area (most noticeably in the Western Section of the Study Area, although a nationwide recession beginning in 2007 has slowed growth). In the Eastern Section of the Study Area, the proposed freeway would abut public parkland, Native American land, and a near-fully developed area—therefore, any contribution to accelerated or induced growth would be constrained. The proposed freeway would be built in an area planned for urban growth as established in local jurisdictions’ land use plans for at least the last 25 years.
6	Purpose and Need	As noted in the Draft Environmental Impact Statement, when compared with the No-Action Alternative, the Preferred Alternative would result in less energy consumption (page 4-160), regional improvements to air quality (page 4-79) that would be expected to produce health benefits, and economic benefits of reducing regional traffic congestion (page 4-57), and would be consistent with local and regional long-range planning efforts (page 4-18).
7	Alternatives	Federal regulations stipulate that an environmental impact statement shall “rigorously explore and objectively evaluate all reasonable alternatives” (40 Code of Federal Regulations § 1502.14; see Final Environmental Impact Statement page 3-1). All alternatives were screened using a multidisciplinary set of criteria. Nonfreeway alternatives were considered (see Final Environmental Impact Statement pages 3-3 through 3-6). Among other things, the study took into account improving existing freeways, improving or expanding other travel modes, strategies to reduce travel demand, and various roadway configurations. This study examined not only the potential impacts from improvements, but also the consequences of building nothing, the No Action Alternative. As proposed by the Maricopa Association of Governments, the South Mountain Freeway would be part of the Regional Freeway and Highway System. Other transportation improvements such as mass transit and local roads are specified in the <i>Regional Transportation Plan</i> and were considered during the evaluation of this proposed new freeway. As noted in the Final Environmental Impact Statement (see page 3-60), the proposed freeway would provide opportunities to enhance operation of future mass transit improvements.

Code	Comment Document
	<p>From: Projects To: ADOT Subject: FW: Loop 202 South Mountain Freeway Study Date: Monday, May 20, 2013 8:23:42 AM</p> <hr/> <p>From: Heidi Cordova [mailto:hcordova@cox.net] Sent: Sunday, May 19, 2013 1:51 PM To: Projects Subject: Loop 202 South Mountain Freeway Study</p> <p><i>TO: Arizona Department of Transportation and the Federal Highway Administration</i></p> <p><i>RE: Sun Circle Trail Riders – Opposition to South Mountain Freeway Construction</i></p> <p>SCTR is an organization put into place by Arizona visionaries, and for the last 40 years SCTR has continued to ride our horses in the South Mountain Park.</p> <p>SCTR is steadfastly opposed to any alignment of the Loop 202 South Mountain Freeway that allows for trespass onto the Mountain Preserve or for any excavation into the South Mountain what so ever. These mountain preserves ensures a lifestyle that 80% of Arizona voters consistently support. The mountain preserves are unique and are for people and wildlife, not for vehicle trespass. SCTR does not agree with many of the DEIS assumptions finding them objectionable and deficient in the following analysis areas.</p> <p><u>Unacceptable Pre-Decisional Actions:</u> ADOT has made some pre-decisional actions with the purchase of property before the Draft Environmental Impact Statement (DEIS) was released. Phoenix Mountains Preservation Council (SCTR) questions the legality of this action and the entire DEIS when it appears ADOT has already made considerable financial investment to establish the alignment for the South Mountain Freeway rather than follow the prescribed process.</p> <p><u>Dismal Wildlife Connectivity:</u> The DEIS does not meet the minimal requirements for coordination and analysis of wildlife resources. The Arizona Game and Fish Department was consulted in 2009 during scoping. The current connection to the Estrella Mountains allows for passage of mule deer, javelina, bobcat, and mountain lion. There is no evidence of further efforts to ascertain wildlife connectivity needs or possible mitigation. The Sonoran desert tortoise provides additional evidence of inadequate cumulative analysis given its status as a U.S. Fish & Wildlife Service’s candidate species. The mountain ridge area slated for demolition meets the definition for the tortoise’s habitat.</p> <p><u>Unreasonable Taking of Mountain Preservation Lands:</u> The DEIS states in Figure 5-7 Public Parkland the avoidance of taking over 30 acres of the Preserve is “not prudent and feasible”. The taking of this mountainside will destroy important archeological, spiritual, cultural and recreational sites with no realistic or reasonable mitigation possible in the study. The study failed to recognize and address new two trails, Gila and Bursera Trails, created in the southwest end of the Preserve in 2010.</p> <p><u>Outdated Data Projections Used:</u> The DEIS is based on outdated data projections that are now six to eight years old. The analysis does not acknowledge the impact the major</p>

Code	Issue	Response
1	Alternatives	<p>The comment suggests the environmental impact statement process was biased by a history of property acquisitions within the Study Area. More specifically, properties falling within the limits of the Preferred Alternative, as identified in the Final Environmental Impact Statement, were targeted for acquisition.</p> <p>As noted in text on page 3-54 of the Final Environmental Impact Statement, the Arizona Department of Transportation began acquiring land for the original alignment in 1988. Between 1988 and 2001, the Arizona Department of Transportation acquired approximately 293 acres. Most of this land (258 acres) is located in the Eastern Section along Pecos Road. In 2006, the Arizona Department of Transportation began protective and hardship land acquisition in the alignment right-of-way footprint for the W59 and E1 Alternatives. Between 2006 and October 2013, the Arizona Department of Transportation purchased 326 acres (303 in the Western Section and 23 in the Eastern Section).</p> <p>The process for hardship and advanced acquisitions is explained in text on page 4-50 of the Final Environmental Impact Statement.</p> <p>The comment infers that by taking such action, the objective equal consideration of the alternatives studied in detail in the Draft and Final Environmental Impact Statements is tainted. Advanced acquisitions in parallel to a National Environmental Policy Act environmental determination process is not unprecedented and is common practice. In this case, property acquisitions by the Arizona Department of Transportation for purposes of implementing the proposed action are done at risk as communicated to the agency by the Federal Highway Administration. If another action alternative were to be ultimately selected, the agency would likely have to place the acquired properties on the market for sale and purchase. The Arizona Department of Transportation attempts to balance the risk against its mission of timely delivery of transportation infrastructure to the driving public. Further, Federal Highway Administration regulations do not allow the ownership of right-of-way to be a factor in the decision regarding the selection of an alternative.</p>
2	Biology, Plants, and Wildlife	<p>The section, <i>General Impacts on Vegetation, Wildlife, and Wildlife Habitat</i>, beginning on page 4-125 of the Draft Environmental Impact Statement, discloses by what means the proposed action and its alternatives would affect vegetation, wildlife, and wildlife habitat. A Biological Evaluation was submitted to the U.S. Fish and Wildlife Service, Arizona Game and Fish Department, and Gila River Indian Community Department of Environmental Quality that addressed threatened, endangered, and candidate species, including the Sonoran desert tortoise. The information used to prepare the analysis in the Draft Environmental Impact Statement (page 4-122) was based on 2011 information retrieved from the Arizona Game and Fish Department (Gopherus agassizii, draft unpublished abstract compiled and edited by the Heritage Data Management System, Phoenix). Current information on threats and connectivity strategies was included in the Biological Evaluation. The U.S. Fish and Wildlife Service concurred with the species determinations in the Biological Evaluation (see Appendix 1-1 of the Final Environmental Impact Statement).</p> <p>Connectivity is planned to allow wildlife movement beneath the freeway in multiuse crossings (see page 4-137 of the Final Environmental Impact Statement). The Federal Highway Administration and Arizona Department of Transportation have committed to providing mitigation by including multifunctional crossing structures designed for</p>

(Response 2 continues on next page)

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6	economic downturn had and it brings into question the validity of projected growth levels put forth in the DEIS. In all the alternative studies, the DEIS does not provide one alternative analysis to the demolition of the southwest ridges of South Mountain. Furthermore, nowhere in this study is there an assessment of hazardous material truck traffic nor any mention of managing this truck traffic and the consequences of a serious hazard waste incident.
7	
8	<p>Over 3 million visitors come to South Mountain Park/Preserve annually, according to City of Phoenix statistics. Destroying any part of the mountain to align a high-capacity freeway will only have a negative impact on tourism and the many unique resources the park offers.</p> <p>We urge ADOT to stop providing studies that do not accurately or thoroughly address the impact this freeway has on South Mountain. It's time to stop the \$20 million and more in wasted tax payer's money to study the environmental impact and design for an alignment that no longer makes sense.</p>
<div>Confidentiality and Nondisclosure Notice: This email transmission and any attachments are intended for use by the person(s)/entity(ies) named above and may contain confidential/privileged information. Any unauthorized use, disclosure or distribution is strictly prohibited. If you are not the intended recipient, please contact the sender by email, and delete or destroy all copies plus attachments.</div>	

Code	Issue	Response
2 (cont.		wildlife and for limited human use as well as culverts designed for connectivity for smaller species. Wildlife-friendly design information would be considered during the design of drainage and crossing structures for the freeway (see <i>Mitigation</i> , beginning on page 4-138 of the Final Environmental Impact Statement).
3	Section 4(f) and Section 6(f)	<p>The religious and cultural importance of the South Mountains (as exemplified in the comment's reference to the Gila River Indian Community resolution) is acknowledged in the Draft Environmental Impact Statement in several locations, notably pages 4-132 and 5-26 as well as in the Summary of the Draft Environmental Impact Statement. The description in the Draft Environmental Impact Statement is based on input received from the Gila River Indian Community and its members and other Indian Nations and their members. The Draft Environmental Impact Statement, after consultation and coordination efforts, accommodates and preserves (to the fullest extent possible from the available alternatives) access to the South Mountains for religious practices. A very small portion of the mountain would be impacted by the proposed freeway (less than 0.03 percent of the total area). Although the Draft Environmental Impact Statement describes the impact on the South Mountains as adverse, Native Americans would not be kept from practicing their beliefs, access to the mountain would be maintained, and mitigation measures would be implemented based on input from members of the Gila River Indian Community.</p> <p>The Final Environmental Impact Statement includes discussion on efforts to avoid use of Phoenix South Mountain Park/Preserve, starting on page 5-16. Measures to minimize harm to the park as a result of the proposed freeway start on page 5-23. The portion of the park that would be used for the proposed freeway would be 31.3 acres, or approximately 0.2 percent of the park's approximately 16,600 acres (see Final Environmental Impact Statement pages S-39 and 5-31). The activities that make the park such a highly valued resource (recreational activities, interaction with the Sonoran Desert) would remain.</p>

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4	Section 4(f) and Section 6(f)	<p>South Mountain’s newest trails are the Bursera and Pyramid Trails (see Final Environmental Impact Statement page 5-8). The E1 Alternative is approximately 1 mile south of the Pyramid Trail and even farther from the Bursera Trail; thus, it would not affect either trail. The trails have walk-in access from Chandler Boulevard and 19th Avenue, with on-street parking. This walk-in access would be north of and adjacent to the planned extension of Chandler Boulevard and, thus, would not be directly affected. The walk-in access point and the part of the Pyramid Trail at the access point are located adjacent to a residential neighborhood and the City of Phoenix’s planned Chandler Boulevard Extension. These trails are typically used for high-intensity recreational activities such as running, hiking, and biking, not noise- or viewshed-sensitive activities. All proposed action alternatives would span existing and proposed trails to avoid impacts. However, during construction (if an action alternative were selected), trails that would be spanned or would be near potential freeway construction would be closed for limited times for safety reasons. Closures would necessitate that trail users detour around construction sites to rejoin the trails farther along their length. According to Phoenix South Mountain Park/Preserve rangers, the Gila Trail—although well-defined—is not a designated trail within the park. That said, the Gila Trail would not be affected by the proposed freeway or by the Chandler Boulevard Extension. The Final Environmental Impact Statement Appendix page A665 contains information directly from the Phoenix General Plan and early coordination with the City of Phoenix Parks Department. The trails in the preserve are exceptions to this statement and were always meant as such. The trails within 1/4 mile of the proposed alternatives were treated separately, as in the case of the Maricopa County Regional Trails System. Should an alternative be selected, the Arizona Department of Transportation and Federal Highway Administration would work closely with the City of Phoenix during final design to ensure the connectivity of trails is maintained, whether they are eligible as Section 4(f) resources or not.</p>
5	Purpose and Need	<p>The analyses in the Draft Environmental Impact Statement used socioeconomic and traffic projections at the regional analysis zone and traffic analysis zone levels. At the time of publication of the Draft Environmental Impact Statement, Census 2010-based socioeconomic data at the regional analysis zone and traffic analysis zone levels had not been adopted by the Maricopa Association of Governments and were not available to the project team. Therefore, the data used in the Draft Environmental Impact Statement were the most appropriate information available.</p> <p>The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future.</p>

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6	Alternatives	Several action alternatives were subject to the alternatives development and screening process; not just the E1 Alternative and alternatives located on the Gila River Indian Community (Figure 3-6 on page 3-10 of the Final Environmental Impact Statement illustrates a representation of such alternatives). Ultimately the other alternatives were eliminated from further study in the screening process and the Gila River Indian Community decided not to give permission to study alternatives on its land (see Final Environmental Impact Statement page 3-25). Therefore, the Arizona Department of Transportation, with concurrence from Federal Highway Administration, identified the E1 Alternative as the eastern section of the Preferred Alternative (which includes the W59 Alternative in the Western Section of the Study Area). In reaching its determination, the Arizona Department of Transportation sought to balance its responsibilities to address regional mobility needs while being fiscally responsible and sensitive to local communities.
7	Hazardous Materials	If the proposed action the Selected Alternative in the record of decision, planning for emergency situations would be initiated. If the plan is amended, it is made available to the Arizona Department of Transportation.
8	Section 4(f) and Section 6(f)	City of Phoenix planning efforts since the mid-1980s illustrate an awareness of the potential for the proposed freeway to affect Phoenix South Mountain Park/ Preserve. In 1989, the South Mountain Park Master Plan was adopted by the Phoenix City Council. The master plan shows the freeway alignment as adopted by the State Transportation Board in 1988. In 1990, the South Mountain Preserve Act was ratified by the Arizona Legislature. The Act did not apply to roadways through a designated mountain preserve if the roadway was in the State Highway System prior to August 15, 1990. The proposed freeway was in the State Highway System prior to 1990. Records prior to the Act suggest a primary reason for the exception was to allow the proposed freeway to go through Phoenix South Mountain Park/ Preserve (see Final Environmental Impact Statement page 5-14). The project team examined alternatives to avoid the park, but did not identify any feasible and prudent alternatives to avoid impacts. The portion of the park that would be used for the proposed freeway would be 31.3 acres, or approximately 0.2 percent of the park's approximately 16,600 acres (see Final Environmental Impact Statement pages S-39 and 5-31). The activities that make the park such a highly valued tourist attraction(recreational activities,interaction with the Sonoran Desert) would remain. The Arizona Department of Transportation continues to work with park stakeholders to minimize impacts and address concerns. Measures to minimize harm to the park were developed (see Final Environmental Impact Statement, starting on page 5-23).

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	<div>4248</div> <div><div><div>1THE FACILITATOR: Thank you.</div><div>2If you'd like to speak and haven't</div><div>3registered out front, please do so.</div><div>4THE FACILITATOR: Will Novak.</div><div>5MR. NOVAK: This one?</div><div>6THE FACILITATOR: Please.</div><div>7MR. NOVAK: Hey guys, how are you doing?</div><div>8My name's Will Novak. I'm the president of the</div><div>9Phoenix Historic Neighborhoods Coalition, but I'm</div><div>10also the secretary of a group called the Thunderdome</div><div>11Neighborhood Association for Nonautomotive Mobility.</div><div>12I guess you can probably assume where I'm going to</div><div>13come down on this issue.</div><div>14And it doesn't really matter what we say,</div><div>15because you guys are in the freeway-building</div><div>16business; you have been for -- since the 1970s.</div><div>17You're going to build this freeway, come hell or high</div><div>18water; it really doesn't matter what the citizens say</div><div>19or what makes good sense.</div><div>20I just want to say how disappointed I am.</div><div>21You know, most cities, corrective-thinking cities</div><div>22around the country are tearing down freeways, like</div><div>23San Francisco, they got rid of the Embarcadero</div><div>24Freeway, while we're still building more. Phoenix</div><div>25was once a city there was actually a time where we</div></div><div>Page 62</div><div>Driver and Nix Court Reporters - (602) 266-6525 www.drivernix.com</div></div>

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1	<p>1 fought against building freeways. The Arizona</p> <p>2 Republic came out and said we don't want to build any</p> <p>3 more freeways; we don't want be another Los Angeles;</p> <p>4 we don't want to be a sprawl and air pollution and</p> <p>5 just horrible places. But thanks to, you know,</p> <p>6 short-sighted planning, what we sort have become is</p> <p>7 just a mini version of Los Angeles. I see in your</p> <p>8 paperwork that this project is going to cost</p> <p>9 \$1.23 billion. How many miles of light rail do you</p> <p>10 think you can build for that? How many miles of</p> <p>11 commuter rail? How many trees do you think you could</p> <p>12 plant for \$1.23 billion? I'll bet for that much you</p> <p>13 could fill up the Salt River running over to 19th</p> <p>14 Avenue and extend the Tempe Town Lake and achieve the</p> <p>15 original Rio Salado project vision that the city has</p> <p>16 had for 60 years now. It's just a classic,</p> <p>17 short-sighted Phoenix thinking, you know; we just are</p> <p>18 always in a hurry to screw up and do the wrong thing</p> <p>19 in this town, and it's just devastating.</p> <p>20 The fact that you might cut through South</p> <p>21 Mountain, the largest city-owned park in the world,</p> <p>22 is disgusting. And your study is such a joke anyhow.</p> <p>23 I mean, the idea that you even looked at alternatives</p> <p>24 is laughable. The only alternative you really looked</p> <p>25 into is the no-build scenario, which you're never</p>
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Code	Issue	Response
1	Urban Sprawl	Unplanned growth is often termed “urban sprawl.” Generally, this term is used in the context of rapid and uncontrolled urban growth onto previously undeveloped land—usually on the outskirts of an existing urban area. Projects like the proposed freeway are often identified as contributors to urban sprawl. Freeway projects are often cited as making land at the urban fringe more accessible and, therefore, more attractive for development. However, examination of data comparing population and land use between 1975 and 2000 suggests major transportation projects like the proposed freeway do not induce growth in the region (see Final Environmental Impact Statement pages 4-170 through 4-174). The proposed freeway would be implemented in a historically quickly urbanizing area (most noticeably in the Western Section of the Study Area, although the nationwide recession which began in 2007 slowed growth).). In the Eastern Section of the Study Area, the proposed freeway would abut public parkland, Native American land, and a near-fully developed area—therefore, any contribution to accelerated or induced growth would be constrained. The proposed freeway would be built in an area planned for urban growth as established in local jurisdictions’ land use plans for at least the last 25 years.
2	Purpose and Need	<p>The study has considered a variety of transportation modes: transportation system management/transportation demand management, mass transit (commuter rail, light rail, expanded bus service), arterial street improvements, land use controls, new freeways, and a No-Action Alternative. Mass transit modes such as light rail were eliminated from further study because even better-than-planned performance of transit would not adequately address the projected 2035 travel demand (see Final Environmental Impact Statement page 3-4). Two high-capacity transit corridors are being considered near the western and eastern extents of the Study Area, but such extensions would not adequately address the projected 2035 travel demand. A freeway/light rail combination would integrate a freeway and light rail system into a single transportation corridor (see Final Environmental Impact Statement page 3-6). Such a freeway/light rail system is planned at two locations: along Interstate 10 (Papago Freeway) and along State Route 51 (Piestewa Freeway). These two segments would connect to the light rail system currently in operation. With these two freeway/light rail segments already in planning stages, members of the public identified a similar opportunity along the proposed freeway. Most freeway/light rail combinations, however, radiate from a central travel demand generator such as a business district or airport. No such systems are known to follow a circumferential route, as the proposed freeway would. Furthermore, the additional right-of-way needed for light rail (generally, a 50-foot-wide corridor) would have substantial community impacts such as displaced residences and businesses and parkland impacts. Therefore, the light rail alternative was eliminated from further study. The freeway mode was determined to be an appropriate response to the project’s purpose and need.</p> <p>The analyses in the Draft Environmental Impact Statement used socioeconomic and traffic projections at the regional analysis zone and traffic analysis zone levels. At the time of publication of the Draft Environmental Impact Statement, Census 2010-based socioeconomic data at the regional analysis zone and traffic analysis zone levels had not been adopted by the Maricopa Association of Governments and were not available to the project team. Therefore, the data used in the Draft Environmental Impact Statement were the most appropriate information available. The Maricopa Association of Governments approved new population, employment, housing, and traffic projections in June 2013. The new data are presented in the</p>

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Code	Comment Document
5	<p>1 going to do. I mean, is this freeway even necessary</p> <p>2 when we have MAG's commuter rail plans come online;</p> <p>3 what about the West Valley light rail going out that</p> <p>4 way? You know, it doesn't even talk about induced</p> <p>5 demand. Anyone who studies transportation and</p> <p>6 planning, all you get when you build a freeway is you</p> <p>7 get more traffic. We've known this for 40 years now,</p> <p>8 that new freeways just induce new demand. All you're</p> <p>9 going to do is build a freeway, which is going to do</p> <p>10 what, it's going to create more sprawl. There's</p> <p>11 going to be a Walmart that pops up and a Kmart, and a</p> <p>12 KFC, and a Church's chicken, and all that stuff, and</p> <p>13 they're going to create more and more cars, and more</p> <p>14 and more air pollution, so you haven't done anything.</p> <p>15 But unfortunately, the way we have things</p> <p>16 set up here is ADOT is in the highway building</p> <p>17 business, so that's a joke; you're going to build a</p> <p>18 highway, no matter what. But just -- yeah, I just</p> <p>19 would hope that you would take a more holistic</p> <p>20 approach in the future, you know, and look into</p> <p>21 what's actually good for this city and this area.</p> <p>22 Because I'm under 30 years, I've got to live here for</p> <p>23 the next 70 years, and I don't want to choke to</p> <p>24 death. And I'm just -- just tired of it. Luckily,</p> <p>25 when my generation grows up and is in charge, this</p>
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Code	Issue	Response
2 (cont.)		Final Environmental Impact Statement beginning on page 1-11. The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future.
3	Section 4(f) and Section 6(f)	As discussed on page 5-16 of the Final Environmental Impact Statement, many alternatives were examined to avoid the use of the South Mountain Park/Preserve; however, none of these alternatives were deemed to be prudent and feasible by the Federal Highway Administration. The Department of the Interior reviewed the Draft Environmental Impact Statement and commented, "Following our review of the Section 4(f) Evaluation, we concur that there is no feasible or prudent alternative to the Preferred Alternative selected in the document, and that all measures have been taken to minimize harm to these resources. Please note, however, that this concurrence is contingent upon successful completion of the Programmatic Agreement among the consulting parties." (See Appendix 1-1 of the Final Environmental Impact Statement.) The Arizona Department of Transportation continues to work with park stakeholders to minimize impacts and address concerns. Measures to minimize harm to the park were developed (see Final Environmental Impact Statement, starting on page 5-23). The portion of the park that would be used for the proposed freeway would be 31.3 acres, or approximately 0.2 percent of the park's approximately 16,600 acres (see Final Environmental Impact Statement pages S-39 and 5-31). Phoenix South Mountain Park/Preserve would remain the largest municipally owned park in the United States. The activities that make the park a highly valued resource (recreational activities, interaction with the Sonoran Desert) would remain. Nine-tenths of a mile of the proposed freeway would pass through the park's southwestern edge (see Final Environmental Impact Statement page 5-13).
4	Alternatives	Several action alternatives were subject to the alternatives development and screening process; not just the E1 Alternative and alternatives located on the Gila River Indian Community (Figure 3-6 on page 3-10 of the Final Environmental Impact Statement illustrates a representation of such alternatives). Ultimately the other alternatives were eliminated from further study in the screening process and the Gila River Indian Community decided not to give permission to study alternatives on its land (see Final Environmental Impact Statement page 3-25). Therefore, the Arizona Department of Transportation, with concurrence from Federal Highway Administration, identified the E1 Alternative as the eastern section of the Preferred Alternative (which includes the W59 Alternative in the Western Section of the Study Area). In reaching its determination, the Arizona Department of Transportation sought to balance its responsibilities to address regional mobility needs while being fiscally responsible and sensitive to local communities. The analyses in the Draft Environmental Impact Statement used socioeconomic and traffic projections at the regional analysis zone and traffic analysis zone levels. At the time of publication of the Draft Environmental Impact Statement, Census 2010-based socioeconomic data at the regional analysis zone and traffic analysis zone levels had not been adopted by the Maricopa Association of Governments and were not available to the project team. Therefore, the data used in the Draft Environmental Impact Statement were the most appropriate information available. The Maricopa Association of Governments approved new population, employment,

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Code	Comment Document
	<div><div></div><div><div>1 kind of crap won't be happening anymore.</div><div>2 Thanks.</div><div>3 Thanks for typing.</div><div>4 THE FACILITATOR: Good afternoon. I'd like</div><div>5 to introduce the 2:00 to 4:00 p.m. panel, with the</div><div>6 Arizona Department of Transportation, Brock Barnhart,</div><div>7 with the Federal Highway Administration, Director</div><div>8 Moreno, and with the Arizona Department of</div><div>9 Transportation, Brent Cain.</div><div>10 Our next speaker is Richard Tracy, Sr.</div><div>11 Mr. Tracy, you now can pick up the</div><div>12 microphone.</div><div>13 MR. TRACY: Can I have about five minutes</div><div>14 to catch my breath?</div><div>15 THE FACILITATOR: Most certainly.</div><div>16 MR. TRACY: It wasn't always this way, you</div><div>17 know. I just lived here 43 years too long.</div><div>18 THE FACILITATOR: Welcome, Mr. Tracy, you</div><div>19 have three minutes.</div><div>20 MR. TRACY: All right. Thank you very</div><div>21 much. It was quite difficult for me to come here.</div><div>22 It's been difficult for me to attend meetings all</div><div>23 over the Valley and send letters, and disappointing</div><div>24 when nobody pays any attention to it. I hope this</div><div>25 is -- okay, as I say, it was difficult to come here.</div></div></div> <div>Page 65</div> <div>Driver and Nix Court Reporters - (602) 266-6525 www.drivernix.com</div>

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4 (cont.)		housing, and traffic projections in June 2013. The new data are presented in the Final Environmental Impact Statement beginning on page 1-11. The purpose and need and analysis of alternatives were updated and reevaluated using these new socioeconomic projections and corresponding projections related to regional traffic. While new projections based on the 2010 Census showed a lower anticipated population and vehicle miles traveled in 2035 than the previous projections, the conclusions reached in the Draft Environmental Impact Statement were validated in the Final Environmental Impact Statement (see Chapter 3, <i>Alternatives</i>). The traffic analysis demonstrated that the proposed project is needed today and will continue to be needed into the future
5	Purpose and Need	The proposed freeway is part of the <i>Regional Transportation Plan</i> for the Maricopa Association of Governments region. The <i>Regional Transportation Plan</i> , as described on pages 1-5 and 1-10 of the Final Environmental Impact Statement, addresses freeways, streets, transit, airports, bicycle and pedestrian facilities, freight, demand management, system management, and safety. The proposed freeway is only one part of the overall multimodal transportation system planned to meet the travel demand needs of the Maricopa Association of Governments region.
6	Air Quality	<p>The Final Environmental Impact Statement addresses the history of air quality in the region (see text beginning on page 4-68 of the Final Environmental Impact Statement). The Clean Air Act § 109(b)(1) requires the U.S. Environmental Protection Agency to promulgate primary National Ambient Air Quality Standards at levels that allow an adequate margin of safety to protect the public health. Air quality in the Phoenix metropolitan area has improved over time; Phoenix was redesignated to attainment/maintenance for carbon monoxide in 2005, and the U.S. Environmental Protection Agency recently determined that Phoenix has attained the particulate matter (PM₁₀) standard. These improvements are largely associated with cleaner fuels and lower-emission vehicles along with local controls on fugitive dust. Future emissions would also be reduced by the use of cleaner burning fuels, technological advances in automotive design (including the greater use of alternative fuel vehicles), reformulated gasoline, gas can standards, stricter enforcement of emission standards during inspections, heavy-duty diesel engine and on-highway diesel sulfur control programs, dust control programs, and others.</p> <p>The air quality assessment for the proposed freeway analyzed impacts from carbon monoxide and particulate matter (PM₁₀) and followed U.S. Environmental Protection Agency guidelines. The carbon monoxide and particulate matter (PM₁₀) analyses demonstrated that the proposed freeway would not contribute to any new localized violations, increase the frequency or severity of any existing violation, or delay timely attainment of the National Ambient Air Quality Standards or any required interim emissions reductions or other milestones. For mobile source air toxics, the analysis showed that for the Study Area, constructing the freeway would have a marginal effect on annual emissions in 2025 and 2035 (less than a 1 percent difference in total annual emissions between the Preferred Alternative and No-Action Alternative). With the Preferred Alternative in 2035, modeled mobile source air toxics emissions would decrease by 57 percent to more than 90 percent, depending on the pollutant, despite a 47 percent increase in vehicle miles traveled in the Study Area compared with 2012 conditions. The air quality analyses were updated for the Final Environmental Impact Statement, including a quantitative particulate matter (PM₁₀) analysis, and are more fully described beginning on page 4-68 of the Final Environmental Impact Statement. Congestion relief resulting from the proposed freeway would provide localized air quality emissions reductions on area freeways and arterial streets and at interchanges, benefiting users of area highways and those living near congested roads.</p>

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	<div>4395</div> <div><div><div>1The amount of money that we're spending on this</div><div>2freeway, 100 million per, what was it, mile, that's</div><div>3outrageous, not to mention the \$20 million to complete</div><div>4this DEIS. People keep talking about cutting down on</div><div>5pollution, but what about the pollution in our community?</div><div>6Do we not matter? The air that we breathe, is our air</div><div>7any less important than the people of Phoenix? When are</div><div>8we going to actually matter? When are those</div><div>9considerations going to happen?</div><div>10And you're blasting through sacred mountain that</div><div>11is religious and sacred to our people. I can't elaborate</div><div>12on that because my time is out, but I just want to</div><div>13mention that that is significant to our people.</div><div>14THE FACILITATOR: Thank you, Ms. Riddle.</div><div>15Our next speaker is David Martin. We welcome</div><div>16David Martin.</div><div>17Welcome, Mr. Martin.</div><div>18MR. MARTIN: Thank you.</div><div>19THE FACILITATOR: You have three minutes.</div><div>20MR. MARTIN: Thank you. Members of the panel,</div><div>21for the record, my name is David Martin, I sort of have</div><div>22multiple hats here today. I am the president of the</div><div>23Associated General Contractors, I chair an organization</div><div>24called We Build Arizona, and I am an Ahwatukee resident,</div><div>25so I sort of wear three hats.</div></div><div>Page 52</div><div>Driver and Nix Court Reporters - (602) 266-6525 www.drivernix.com</div></div>

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	<div><div>1 But one of the things I want to bring to your 2 attention is a poll that we conducted and submitted into 3 the record, with your permission. Members of the South 4 Mountain study team, thank you very much for the 5 opportunity to speak today. I'm here on behalf of all 6 the memberships that I mentioned before to talk to you 7 about a poll that we conducted and letting you know that 8 Valley commuters have waited in traffic jams too long. 9 The freeway will cut traffic congestion across the metro 10 area, it'll reduce air pollution, and save drivers time 11 and money. Registered voters responding to a poll that 12 our organization conducted a little more than two weeks 13 ago happen to agree; 64.3 percent of likely voters in 14 Maricopa County support construction of the freeway. 15 Just 19.6 percent said they were either opposed or likely 16 to oppose the project. 17 And in a separate survey, we found that 59 18 percent of likely voters living in Ahwatukee and Laveen 19 support the freeway as well. As a resident of Ahwatukee 20 for 15-plus years and a third-generation Arizonan, I know 21 that people support the project and support the corridor 22 for the project. Jumping onto I-10 downtown in Phoenix 23 every morning is extraordinarily hectic. If the 24 projections of the study come true, I might as well 25 abandon the area of Ahwatukee and convince someone to</div><div>Page 53</div><div>Driver and Nix Court Reporters - (602) 266-6525 www.drivernix.com</div></div>

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1 take my home. Honestly, I don't want to be around if a
2 freeway is not built. This corridor is extraordinarily
3 important to congestion and to the future of Ahwatukee.

4 Ladies and gentlemen of the committee, the two
5 polls I want to submit to the record today, the voters
6 have spoken three times on this issue: Once in 1985, one
7 in 2004, and again with the poll that we submitted or
8 will be submitting here today. We must bring this EIS to
9 its conclusion; 12 years of study, this corridor flies in
10 the face of the voters who voted this project in. There
11 is no more important project to area commuters and
12 workers in the southbound freeway project. We must build
13 it now. Thank you very much.

14 THE FACILITATOR: Thank you, Mr. Martin.

15 I'd like to invite our next speaker, Joseph
16 Morago.

17 Welcome, Mr. Morago. You have three minutes.

18 MR. MORAGO: For the record, it's Joseph Morago.
19 Good afternoon, my name is Joseph Morago. I was born and
20 raised in Arizona, I'm a Native American from Akimel
21 AuAuthm tribe, a member of Gila River Alliance for a
22 Clean Environment, as well as PARC. I'm here today to
23 state my opposition for the proposed South Mountain
24 Loop 202 freeway. After reviewing the DEIS, I was
25 shocked to learn how little information is present in

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1		Comment noted.