10. STATUTE OF LIMITATIONS

To facilitate certainty and predictability in the transportation decision-making process and in transportation program implementation, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) established a restriction on the statute of limitations regarding claims with respect to FHWA actions. This restriction was modified by Moving Ahead for Progress in the 21st Century by shortening the period during which such claims must be filed from 180 to 150 days.

Part A of Section 6002 of SAFETEA-LU makes clear that FHWA may publish a notice in the Federal Register, pursuant to 23 U.S.C. § 139(1), indicating that it and the cooperating federal agencies have taken a final action regarding the decision-making process for a proposed action. This final action (this ROD, for the South Mountain Freeway) pertains to all issues that have been addressed under the NEPA process, such as project alternatives, potential environmental effects of the proposed action, and the avoidance and minimization of impacts. Claims seeking judicial review of the FHWA action will be barred unless such claims are filed within 150 days after the date of publication of the notice regarding the statute of limitations for the proposed action. If no notice is published, then the period that would otherwise be provided by the federal laws governing such claims applies (typically 6 years).

11. DESIGN PHASE

ADOT will engage the public during design of the proposed action to address specific design-related issues as specified in the aforementioned commitment list. For projects like the South Mountain Freeway, ADOT, in the past, has held advertised public meetings to present design details—particularly to show where the freeway will be located, its profile, service traffic interchange configurations, noise barrier locations, and architectural treatments. Examples of this type of interaction can be found throughout Chapter 4, *Affected Environment*, *Environmental Consequences*, and Mitigation, in the FEIS. During the design phase, the public will be able to

contact ADOT through a project e-mail and telephone hotline.

12. CONSTRUCTION

During construction, ADOT typically holds information meetings at the beginning of construction activities regarding the upcoming improvements and work schedules. The public will be informed through construction updates/newsletters, project information hotlines, Web sites, periodic meetings, project offices, and radio and newspaper advertising.

13. POSTCONSTRUCTION

ADOT will be responsive to the general public when concerns arise regarding the freeway's operation. As an example, ADOT will respond to complaints regarding traffic-generated noise by monitoring postconstruction noise on request, as considered on a case-by-case basis. Examples of this type of interaction can be found throughout Chapter 4, *Affected Environment*, *Environmental Consequences*, and *Mitigation*, in the FEIS.

14. DETERMINATIONS AND FINDINGS

The South Mountain Freeway (Loop 202) Interstate 10 (Papago Freeway) to Interstate 10 (Maricopa Freeway)
Draft Environmental Impact Statement and Section 4(f)
Evaluation and the South Mountain Freeway (Loop 202)
Interstate 10 (Papago Freeway) to Interstate 10 (Maricopa Freeway) Final Environmental Impact Statement and
Section 4(f) Evaluation are part of the environmental record for the South Mountain Freeway project and support this ROD. These documents constitute the detailed statements required by NEPA and Title 23 of the U.S.C. on the following:

- ➤ the project's environmental effects
- ➤ adverse environmental effects that cannot be avoided if the project is implemented
- ➤ alternatives to the proposed project
- ➤ irreversible and irretrievable effects on the environment that might be involved with the project if it is implemented

15. ENVIRONMENTALLY PREFERABLE ALTERNATIVE

CEQ regulations [40 C.F.R. § 1505.2(b)] require the ROD to identify the environmentally preferable alternative. The *environmentally preferable alternative* is defined as the alternative that causes the least damage to the biological and physical environment and best protects, preserves, and enhances historic, cultural, and natural resources. Designation of the environmentally preferable alternative typically involves judgment and the balancing of some environmental values against others. CEQ notes that comments on draft environmental documents (such as the DEIS, FEIS, and errata for this project) can assist the lead agency in developing and determining environmentally preferable alternatives.

Although the No-Action Alternative would overall have less environmental impact, this alternative does not meet the project's purpose and need. Many mitigation measures have been added to the ROD based on comments received on the DEIS, FEIS, and errata. The Selected Alternative is the environmentally preferable alternative that satisfies the project's purpose and need. Although the Selected Alternative does not have the least impact in every environmental discipline, ADOT and FHWA believe that this alternative best balances environmental effects and benefits. The Selected Alternative will meet the project needs as well as or better than the other alternatives. The Section 4(f) evaluation demonstrated that no feasible and prudent avoidance alternatives to use of the South Mountains' Section 4(f) resources are available. Direct use of the resource is the same regardless of the combination of action alternatives in the Western and Eastern Sections (representing a range of reasonable alternatives). Relative to other action alternatives considered, the Selected Alternative will have similar environmental effects on natural resources, cultural resources, hazardous materials, and noise; will displace fewer residences; will have the lowest impact on total tax revenues of local governments; will have lower construction costs; will cause less construction disruption overall to I-10 (Papago Freeway); will include measures to reduce impacts

and minimize harm; represents all possible planning to minimize harm to resources afforded protection under Section 4(f); is favored by the majority of local governments; and will allow regulatory permitting requirements to be met.

Clean Water Act

Pursuant to Section 404 of the CWA, USACE requires a permit for any discharge of dredged or fill material in waters of the United States (33 U.S.C. § 1344). Regulations and recent court decisions control which water bodies might be included under the jurisdiction of Section 404. USACE will not issue a permit until the project design is at an appropriate level of detail, compliance with the ESA and NHPA processes has been achieved, and ADEQ has issued a Section 401 Water Quality Certification.

The Selected Alternative is anticipated to affect less than 0.5 acre of jurisdictional waters in the vicinity of the Salt River and will be permitted under a nationwide permit; however, in the Eastern Section of the Study Area, the Selected Alternative will cross several jurisdictional waters. These washes receive runoff from the South Mountains that passes under Pecos Road through a series of culverts following natural drainages/washes. The design of the Selected Alternative will alter the drainage pattern through use of a series of drainage detention basins that will direct runoff to specific locations to discharge under the freeway and onto Community land (see the section, Drainage, beginning on page 3-58 of the FEIS). As committed to in the DEIS, a field delineation of jurisdictional waters for the Preferred Alternative (now Selected Alternative) was conducted in the summer of 2013 to identify jurisdictional waters and to define the jurisdictional limits for the CWA Section 404 permitting. A preliminary jurisdictional determination request was submitted to USACE in January 2014 in accordance with USACE and ADOT guidelines. USACE issued a preliminary jurisdictional determination in March 2014.

The Selected Alternative is anticipated to permanently affect between 1 and 2 total acres of jurisdictional waters

(ephemeral washes), including potential disturbances of greater than 0.5 acre at individual wash crossings; CWA permitting will be determined during the project design phase, but permits will be required under Sections 404 and 401 of the CWA. ADOT has followed Section 404 Individual Permit requirements in addressing Section 404(b)(1) guidelines (see page 3-27 of the FEIS). USACE participated with FHWA and ADOT in the identification of the Selected Alternative. Under Section 404(b)(1), USACE is obligated to select the least environmentally damaging practicable alternative after considering cost, existing technology, and logistics, in light of overall project purposes. USACE will make this determination during the final design and permitting of the project (see the letter dated January 28, 2015, in Appendix D related to USACE's permitting strategy for the South Mountain Freeway). The general and special conditions of the Section 404 permits will minimize impacts on jurisdictional waters to the extent practicable.

National Historic Preservation Act, Section 106

Section 106 of the NHPA, as amended, requires that federal agencies take into account the effects of their undertakings on historic properties and implement a government-to-government relationship between the federal government and Native American Tribes as described beginning on page 4-140 of the FEIS (while the NHPA was previously codified at Title 16 of the U.S.C., effective December 19, 2014, it was moved to Title 54 [54 U.S.C. § 300101 et seq.]). This process requires consultation with tribal authorities, the SHPO, and other stakeholders. Consultation has occurred with Community government officials, the THPO, many different Native American tribal authorities, and SHPO. The consultation has resulted in concurrence from the Community THPO, other Native American tribal authorities, and SHPO on NRHP eligibility recommendations (including TCPs), project effects, and proposed mitigation and measures to minimize harm to historic properties. This consultation has been ongoing and will continue until all commitments in the ROD are completed.

Coordination efforts to assess possible impacts of implementation of the Selected Alternative on cultural resources have been extensive. As part of this coordination, adjustments have been made to the Selected Alternative to avoid and reduce impacts on known cultural resources in the Study Area. Avoidance of impacts entirely will not be possible; implementation of the Selected Alternative will affect prehistoric and historic cultural resources:

- ➤ The Selected Alternative will cross 16 archaeological sites; archaeological excavations and other forms of data collection will occur to determine the full extent of these sites and any others that may be discovered and mitigate the adverse effects of the undertaking.
- ➤ The Selected Alternative will adversely affect the South Mountains TCP and archaeological sites that contribute to its NRHP eligibility; a multifaceted program of tribal outreach and consultation, ethnographic studies, archival research, and archaeological documentation will be implemented to mitigate the adverse effects of the undertaking on the South Mountains TCP.

Impacts on these resources will be mitigated through use of strategies outlined in Table 3, beginning on page 38. In addition, implementation of the enhancement and management plan for the Villa Buena and Pueblo del Alamo TCPs will prevent adverse effects on these sites. Because effects on NRHP-eligible sites are not fully known, a programmatic agreement (PA) has been developed and executed. The PA describes the process for proper treatment and management of affected resources (see text box on page 4-159 of the FEIS). The PA was executed in 2006 with a 10-year term (see Appendix 4-6 on page A674 in Volume II of the FEIS).

Department of Transportation Act of 1966, Section 4(f)

Section 4(f) of the Department of Transportation Act of 1966 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 FEIS, Chapter 5, Section 4(f) Evaluation].

The FEIS acknowledges the substantial value of the South Mountains as a Section 4(f) resource in terms of its parkland and historic and cultural importance. The discussion of the park as a Section 4(f) resource recognizes that many prominent features of the park contribute to its value. These include its setting as one of the largest urban parks in the country, its function in the Phoenix Sonoran Preserve System, and many prominent features within the park, including its trails, which offer opportunities to over 3 million annual visitors for hiking, bicycling, horseback riding, and interacting with the natural Sonoran Desert adjacent to the metropolitan area. Sections of the freeway will be visible from certain vantage points within the park, such as along the Bursera Trail. Figure 21 depicts the scale at which the freeway will likely be viewed.

As part of the planning to minimize harm to the park, measures to minimize the effects of altering the views include:

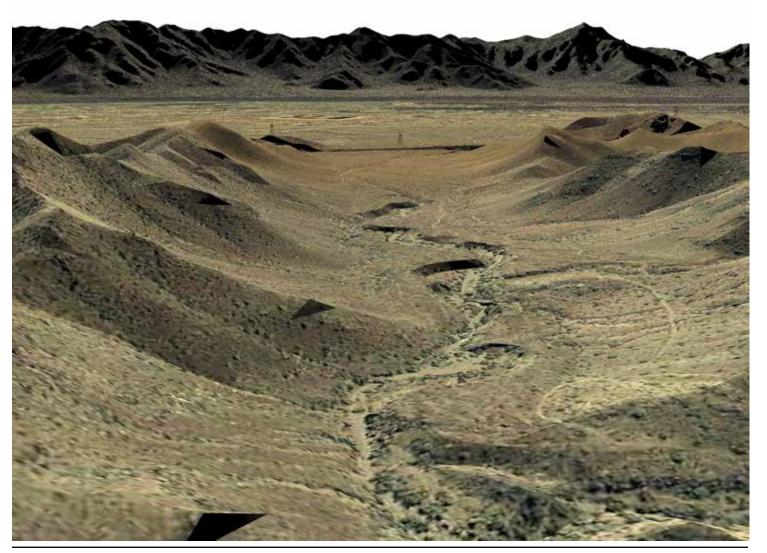
- ➤ reducing the freeway's footprint from the original 40 acres as proposed in 1988 to the 31.3 acres planned for under the current design
- ➤ skirting the park as much as possible to avoid bisecting the 16,000-acre park
- ➤ providing replacement lands to compensate for the use of 31.3 acres of the park
- ➤ using slope treatments, rock sculpting, native vegetation landscaping and buffering, and native vegetation transplanting to blend the appearance of the freeway and slope cuts with the surrounding natural environment, as feasible
- ➤ working with park stakeholders through the City of Phoenix in finalizing these improvements

The freeway will also generate noise that will be audible from certain points in the park, such as trails, as acknowledged in the FEIS; however, based on the distance of the freeway to the closest trail points, noise levels are not likely to be above the noise abatement criteria levels for recreational activities. Trail users located 2,000 feet or more away from the freeway will hear an increased hum, but the decibel levels will not be above noise abatement criteria levels for recreational activities. While noise mitigation was evaluated to minimize harm, the use of mitigation, such as noise barriers, would have little effect for receptors 2,000 feet or more away from the freeway (and at elevated

positions). Even if it were shown that noise levels are higher on the trail, noise barriers would not be cost effective for trails given the relatively low usage and receptor benefits. Noise impacts would be temporary because trail users would be moving along the trail and because only a short portion of the trail is in a direct line to the freeway.

The project team examined alternatives to avoid SMPP, but did not identify any feasible and prudent alternatives to avoid the use of the park. Use of a portion

Figure 21 Photo Simulation, View from Bursera Trail to South Mountain Freeway



View from the Bursera Trail southwest across the valley between Main Ridge North and Main Ridge South, with the Sierra Estrella in the background. The freeway passes through the far western end of the ridges and is represented by the dark shading next to the towers for the high-voltage overhead power lines.

of the mountains for the purposes of the proposed freeway represents two-tenths of 1 percent of the total mountain range (31.3 acres of the park's approximately 16,600 acres; see FEIS pages S-39 and 5-31). Since 1988, and as part of this EIS process, several measures have been undertaken and will be undertaken to further reduce effects on the mountains. These measures, including narrowing the design footprint and acquiring replacement land immediately adjacent to the mountains, are outlined in text beginning on page 5-23 of the FEIS. SMPP will remain one of the largest municipally owned parks in the United States. The activities that make the park a highly valued resource (recreational activities, interaction with the Sonoran Desert) will remain. Nine-tenths of a mile of the proposed freeway will pass through the park's southwestern edge (see FEIS page 5-13).

The South Mountains TCP will be affected by the Selected Alternative. The Pueblo del Alamo TCP is also within the area that will be affected by the Selected Alternative; however, implementation of the enhancement and management plan for the Pueblo del Alamo and the Villa Buena TCPs will prevent adverse effects. The South Mountains TCP is culturally important to Native American Tribes. For more discussion of TCPs, see the section, Cultural Resources, beginning on page 4-140 of the FEIS and pages 5-26 through 5-28. The Selected Alternative, after consultation and coordination efforts, will accommodate and preserve (to the fullest extent possible) access to the South Mountains for religious practices. Although the FEIS describes the impact on the South Mountains as adverse, Native Americans will not be prohibited from practicing their beliefs, access to the mountain will be maintained, and mitigation measures developed through consultation and coordination will be implemented.

FHWA's analysis for the Selected Alternative found that there is no prudent and feasible alternative to using the South Mountains and that the project includes all possible planning to minimize harm to the resource resulting from the use. This conclusion was supported by the U.S. Department of the Interior in its comment

on the Final Environmental Impact Statement: "The Department agrees that the South Mountain Park and Preserve (SMPP) is a Land and Water Conservation Fund (LWCF) assisted site that will be directly impacted by the subject project. These documents assess the direct use of park land for freeway purposes to be 31.3 acres. We agree with the conclusions stated. We note that the "Measures to Minimize Harm" on the Section 4(f) Statement pages 5-23, 5-24, and 5-25 have annotated a commitment to provide replacement land for the converted park land. The Department concurs with the assessment of the impacts to the LWCF-assisted resource and acknowledges the mitigation commitment." The complete letter can be found in Volume II, Appendix A, on page A5.

Measures to minimize harm to the South Mountains TCP (and TCPs that contribute to the South Mountains TCP) were developed in consultation with the Community (and other Tribes with interest). During the design phase, ADOT will consult directly with the Community and other interested Tribes to identify and implement other design measures, when feasible, to further reduce land requirements needed for the proposed action. (See Table 3, beginning on page 38, for the discussion on measures to minimize harm.)

Land and Water Conservation Fund Act (LWCFA), Section 6(f)

Section 6(f) of the Land and Water Conservation Fund Act (LWCFA), administered by the Interagency Committee for Outdoor Recreation and National Park Service (NPS), pertains to projects that would cause impacts on or result in the permanent conversion of outdoor recreational property acquired with LWCFA assistance. The LWCFA established the Land and Water Conservation Fund (LWCF), a matching assistance program providing grants paying half the acquisition and development cost of outdoor recreational sites and facilities. Section 6(f) prohibits the conversion of property acquired or developed with these grants to a nonrecreational purpose without approval from the Interagency Committee for Outdoor Recreation and NPS. NPS must ensure replacement lands of equal

value, location, and usefulness are provided as conditions of approval for land conversions (16 U.S.C. §§ 4601-4 through 4601-11, 36 C.F.R. § 59.3). Section 4(f) properties that have received LWCFA assistance are discussed in tables associated with Figures 5-6 and 5-7, beginning on page 5-10 of the FEIS. All recreational features developed with Section 6(f) funding in the Study Area would be avoided and are, therefore, not discussed further.

The U.S. Department of the Interior reviewed the FEIS and agreed that SMPP is a LWCF-assisted site that will be directly affected by the project. It agreed that the direct use of park land for freeway purposes was 31.3 acres and that a commitment to provide replacement land for the converted park land was provided in the measures to mitigate harm. The U.S. Department of the Interior concurred with the assessment of the impacts to the LWCF-assisted resource and acknowledged the mitigation commitment. The complete letter can be found in Volume II, Appendix A, page A5.

Endangered Species Act

The ESA, as amended, is intended to protect threatened and endangered species and the ecosystems on which they depend. When the federal government takes an action subject to the ESA, it must comply with Section 7 of the ESA:

Each Federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded, or carried out by such agency (hereinafter in this section referred to as an "agency action") is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary, after consultation as appropriate with affected States, to be critical, unless such agency has been granted an exemption for such action by the Committee pursuant to subsection (h) of this section. In fulfilling the requirements of this paragraph each agency shall use the best scientific and commercial data available.

The project will not affect any currently listed threatened or endangered species. A Biological Evaluation was submitted to USFWS and the Community's Department of Environmental Quality and a copy was also provided to AGFD. The Biological Evaluation addressed threatened, endangered, and candidate species that may be affected by the South Mountain Freeway.

Since completion of the FEIS, USFWS removed the Tucson shovel-nosed snake from the candidate list; therefore, there is no intent to list the snake as threatened or endangered. As a result, mitigation measures that required preconstruction surveys for the snake have been omitted from the ROD. It is important to note, however, that FHWA and ADOT continue to commit to coordinate with USFWS, AGFD, and the Community's Department of Environmental Quality during the design phase, and this consultation will determine whether any additional species-specific mitigation measures will be required.

In addition to the removal of the Tucson shovel-nosed snake, the yellow-billed cuckoo, which was designated in the FEIS as "proposed threatened," is now listed as threatened with proposed critical habitat. Although proposed critical habitat for the cuckoo occurs within the Study Area, the proposed critical habitat does not occur within the action alternative corridors. The W101 Alternative, the farthest west of any of the action alternatives, is adjacent to the proposed critical habitat within the Salt River floodplain. The Selected Alternative is over 2 miles from the proposed critical habitat; therefore, the determinations in the FEIS and the Biological Evaluation completed for the project are still appropriate. FHWA determined that the Preferred Alternative (now the Selected Alternative) will not affect the yellow-billed cuckoo or its habitat because insufficient suitable habitat exists immediately adjacent to or within the action alternative alignments. USFWS reviewed the Biological Evaluation and provided technical assistance for minimizing impacts to the Tucson shovel-nosed snake and Sonoran desert tortoise. USFWS elected not to comment on the "no effect" findings in the Biological Evaluation.

Roadway Effects on Sonoran Desert Habitat

Roads have biological effects that extend beyond the immediate physical structure and operation of the roadway itself (Forman et al. 2003). The edge effect of roads is variable and can be affected by many roadway or natural factors (Coffin 2007). In general, effects will be more intense when a new road is constructed in a remote, relatively undisturbed habitat area than in areas with existing roads and development. The *Biological* Resources section in the FEIS, beginning on page 4-125, and the Land Use and Secondary and Cumulative Impacts sections, beginning on pages 4-3 and 4-179, respectively, describe the Sonoran Desert habitat in the Study Area and its surroundings. As discussed in that text as well as in Chapter 1, Purpose and Need, in the FEIS, the Study Area is transitioning from predominantly agricultural to suburban uses, with only about 10 percent of the corridor passing through desert habitat. Implementation of the Selected Alternative would be expected to have the greatest impact along the approximately 2.5-mile section that is directly adjacent to Sonoran Desert habitat. This section of roadway would be constructed at the southwestern boundary of SMPP in an area where natural desert vegetation and wildlife are present. This area is currently used for recreation, including hiking and occasional unapproved off-road vehicle use, as well as collection of reptiles as permitted by Arizona law. Additionally, residential developers have submitted plans to the City of Phoenix to construct over 100 homes in some of the remaining habitat located between the Selected Alternative and the boundary of SMPP.

Approximately 6.5 additional miles of the Selected Alternative would be constructed directly adjacent to other developed land uses (agricultural, industrial, residential) but would still be within 1 mile of Sonoran Desert habitat and could potentially result in indirect impacts to desert habitat located at a distance from the road. Although the freeway may not be the primary or sole introduced stressor along much of the project alignment where there are existing roads and development, the additional noise and disturbance

related to the freeway may result in a wider zone of effects in those areas.

The negative effects of roads often outnumber the positive effects for biological resources (Fahrig and Rytwinski 2009). As acknowledged in the FEIS, negative road effects could include increases in local noise, light, pollution, and animal road mortality and could potentially result in lower densities of wildlife populations in the habitat adjacent to the road. Measures have been incorporated into the Selected Alternative to minimize these effects. The Selected Alternative will include construction of fencing designed to prevent wildlife access to the roadway in the section that crosses SMPP. Negative effects would likely remain for species that are able to move over or through large mammal and tortoise exclusion fencing, such as lizards and snakes. Road mortality could be a negative effect in other areas of the project if wildlife exclusion fencing is not provided; an analysis of other likely locations for wildlife to cross the road will be performed during final design to incorporate measures to minimize the potential effects. Native plant species composition in the habitat adjacent to the corridor is likely to be affected by the increased potential for the introduction of invasive species; accordingly, invasive species will be monitored and controlled throughout construction and operation of the Selected Alternative. The Selected Alternative will not jeopardize protected plants or species.

Habitat Connectivity

Roads in general reduce the movement of wildlife and can fragment habitat, isolate wildlife populations, and ultimately diminish landscape connectivity in addition to resulting in direct effects on wildlife such as increased noise levels, loss of habitat, and vehicle-wildlife collisions. ADOT has demonstrated national leadership in implementing measures to maintain landscape connectivity as it pertains to wildlife movement across the state. Beginning in 2003, wildlife experts from various agencies and organizations met to address wildlife habitation fragmentation within Arizona by developing a statewide map and summary

of priority wildlife linkages (Arizona Wildlife Linkages Workgroup 2006). In 2012, a report was released that summarized a workshop held to identify and map important wildlife linkages within Maricopa County (AGFD 2012). ADOT has received input from the Community and AGFD regarding important wildlife habitats and movement areas near the project. These sources and additional comments on the EIS have identified concerns with wildlife movement along the Salt River, between SMPP and habitat areas located on Community land, and between SMPP and the Sierra Estrella (see Figure 4-38 and the text box on page 4-137 of the FEIS and the Biological Evaluation). In addition, wildlife including the Sonoran desert tortoise, which is currently under consideration for listing as threatened under the ESA, occur in SMPP and could suffer increased genetic isolation if connectivity to other populations is further reduced from the current conditions.

ADOT considers several factors to prioritize use of transportation funding and in determining the appropriate approach to mitigate impacts to wildlife connectivity. For a particular project, ADOT considers factors including potential effects on driver safety, regulatory status of species, wildlife linkage priority, the size of wildlife populations in an area, and the likely frequency of use of the crossings. ADOT and FHWA have committed to mitigating the fragmenting effects of this project by enhancing bridges and drainage structures to promote wildlife connectivity between SMPP, the Sierra Estrella, and Community lands (see multiuse crossings and footnote on Figure 16). The enhancements will include providing fencing to guide wildlife to use the crossing structures. The wildlife crossing structures and associated fencing as well as additional design considerations for smaller drainage structures will be developed in coordination with AGFD, the Community, and USFWS. A bridge will span the Salt River supported by piers that will have minimal impacts to the floodplain and negligible effects on connectivity along the riparian corridor.

The freeway will 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 (see the section, Induced Growth, beginning on page 4-182 of the FEIS). Additionally, the area in question has become much more fragmented during the EIS process and continues to experience fragmentation independent of the project. While using State transportation funding to provide wildlife overcrossings beyond those needed in the project design is not a priority of the project, both ADOT and FHWA have committed to enhancing the planned bridges and drainage structures to allow wildlife connectivity and to providing fencing to guide wildlife to use the crossing structures. ADOT and FHWA are willing to partner with other stakeholders to enhance wildlife connectivity across transportation facilities and would consider integrating additional connectivity enhancements into the project if such improvements were externally funded and did not negatively affect the freeway's operational characteristics.

Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970

Land acquisition and relocation assistance services for the project shall be available to all individuals in accordance with the Uniform Act, as amended. The implementing regulation for the Uniform Act on federally funded highway projects is 49 C.F.R. Part 24. The Uniform Act's objectives are to:

- ➤ provide uniform, fair, and equitable treatment of people whose property is acquired or who are displaced as a result of a federally funded project
- ➤ ensure relocation assistance is provided to displaced people to lessen the financial impact of being displaced
- ➤ ensure decent, safe, and sanitary housing will be made available to displacees within the person's financial means.
- ➤ encourage and expedite acquisition by agreement and without coercion

As part of the Uniform Act, ADOT and its consultants and contractors must prevent discrimination in all highway programs and must ensure compliance with Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. § 2000d, et seq.). Accordingly, no person can be excluded from participation in, denied the benefits of, or in any other way be subjected to discrimination under any federally funded program or activity because of his or her race, color, or national origin. For this project, all eligible displaced people will receive the same opportunities with regard to services, benefits, and financial aid. To ensure participation, informational meetings will be scheduled in convenient, accessible locations and at various times.

In the region, ADOT and FHWA consistently apply the required acquisition and relocation assistance program (Uniform Act) afforded to affected residents and businesses.

Executive Order on Environmental Justice

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, signed by the President on February 11, 1994, directs federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. 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. 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. According to FHWA Order 6640.23A, three fundamental environmental justice principles apply to the transportation project development process:

- ➤ 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

ADOT and FHWA have engaged all population segments to ensure access to the EIS study process. Assisted by this involvement, analytical results indicate the Selected Alternative will benefit all populations in the Study Area in general by reducing traffic congestion, enhancing accessibility, and supporting local economic development plans.

- ➤ As part of the approved RTP—which includes planned improvements to the Regional Freeway and Highway System, arterial street network, transit, and other aspects of the region's freeway system (see the text box, What is the Regional Transportation *Plan?*, on page 1-5 of the FEIS)—environmental justice populations will benefit from the RTP at approximately the same level or, in some cases, at a higher level than will populations in areas not considered to have environmental justice populations (MAG 2003). In connecting the eastern, southeastern, and southwestern regions of the Phoenix metropolitan area, the Selected Alternative will provide improved access for all area residents to key employment areas to the north, south, and east along the I-10 corridor, and in central Phoenix.
- ➤ The Selected Alternative will reduce congestion and improve the area transportation system. Improvements will be especially important given the projected growth and development in the southwestern Phoenix metropolitan area. Along with the general population, environmental justice populations will benefit from these improvements. Accessibility to regional public and private facilities and services will be improved.

As is evident along existing freeways in the Phoenix metropolitan area, higher-density housing tends to be located along freeway routes, as can be seen along I-10 in the Study Area. The Phoenix *General Plan* identifies areas of higher-intensity land use along the route of the Selected Alternative, providing the potential benefit of affordable multifamily housing options in the future.

Households using Section 8 vouchers will be affected by the Selected Alternative. Housing units that participate in the program are not limited, except by the availability of vouchers; therefore, the availability of replacement housing is not easily quantified. Based on discussions with the City of Phoenix Housing Department, there is currently replacement housing in the area. The U.S. Department of Housing and Urban Development (HUD) reports that the "rental housing market in the City of Phoenix submarket is currently soft, with an estimated overall rental vacancy rate of 11 percent" (HUD 2013); therefore, replacement housing for residents of apartments potentially displaced by the Selected Alternative is currently available. The Eastern Section of the Study Area has a largely affluent, nonminority population. Although the population in the Western Section of the Study Area is more diverse—with minority populations throughout and low-income populations largely in the area along I-10 adverse impacts will not be predominantly borne by minority or low-income populations. Furthermore, any adverse effects experienced by minority or low-income populations will not be appreciably more severe or greater in magnitude than the adverse effects that will be experienced by other population segments or the general population.

Based on the above discussion and analysis, the Selected Alternative will not cause disproportionately high and adverse effects on any minority or low-income populations in accordance with the provisions of Executive Order 12898 and U.S. Department of Transportation Order 5610.2(a). Even if one were to reach a contrary conclusion and determine that disproportionately high and adverse effects will occur as

a result of the freeway, there is substantial justification for the 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, *Purpose and Need*, of the FEIS). There is no feasible and prudent alternative to the use of the South Mountains, as discussed in Chapter 5, *Section 4(f) Evaluation*, of the FEIS. Mitigation measures as presented in Table 3, beginning on page 38, will result in reduction, minimization, and avoidance of impacts as well as overall benefits to all populations in the Study Area.

Title VI of the Civil Rights Act of 1964

Title VI prohibits discrimination based on race, color, and national origin. Specifically, 42 U.S.C. § 2000d 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." Protections afforded under Title VI apply to everyone, regardless of whether the individual is lawfully present in the United States or is a citizen of the United States.

The minority groups addressed by Title VI are:

- ➤ Black (a person having origins in any of the black racial groups of Africa)
- ➤ Hispanic (a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race)
- ➤ Asian American (a person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands)
- ➤ American Indian and Alaskan Native (a person having origins in any of the original peoples of North America and who maintains cultural identification through tribal affiliation or community recognition)
- ➤ some other race (a person who does not identify with one of the four previously listed races) or persons of more than one race

ADOT and FHWA have engaged all population segments to ensure access to the EIS process (see the section, Agency and Tribal Coordination, on page 68 and Chapters 2 and 6 in the FEIS for further details). Assisted by this involvement, analytical results indicate the Selected Alternative will benefit all populations in the Study Area in general by reducing traffic congestion, enhancing accessibility, and supporting local economic development plans. As part of the approved RTP which includes planned improvements to the Regional Freeway and Highway System, arterial street network, transit, and other aspects of the region's freeway system (see the text box, What is the Regional Transportation Plan?, on page 1-5 of the FEIS)—Title VI populations will benefit from the RTP at approximately the same level or, in some cases, at a higher level than will populations in areas not considered to have Title VI populations (MAG 2003). In connecting the eastern, southeastern, and southwestern regions of the Phoenix metropolitan area, the Selected Alternative will provide improved access for all area residents to key employment areas to the north, south, and east along the I-10 corridor, and in central Phoenix. Improvements will be especially important given the projected growth and development in the southwestern Phoenix metropolitan area. Along with the general population, Title VI populations will benefit from these improvements.

Accessibility to regional public and private facilities and services will be improved. Impacts in the Eastern Section of the Study Area will displace a largely nonminority population. Although the population in the Western Section of the Study Area is more diverse—with minority populations throughout adverse impacts will not be predominantly borne by minority populations. Furthermore, any adverse effects experienced by minority populations will not be appreciably more severe or greater in magnitude than the adverse effects that will be experienced by other population segments or the general population. The Selected Alternative will displace minority families, but all eligible displaced people will receive the same opportunities with regard to services, benefits, and financial aid regardless of his or her race, color, or

national origin. The environmental justice conclusion that there will not be a disproportionately high and adverse effect on minority and low-income populations also supports a determination that there is no disparate impact on minority groups protected by Title VI. Although no disparate adverse impacts on populations afforded protection under Title VI will occur, mitigation measures are nonetheless provided for impacts associated with displacements and relocations and cultural resources (see Table 3, beginning on page 38). As part of the Uniform Act, ADOT and its consultants and contractors must prevent discrimination in all highway programs and must ensure compliance with Title VI. For this project, all eligible displaced people will receive the same opportunities with regard to services, benefits, and financial aid. For additional detail, see page 4-51 of the FEIS.

Additionally, since the beginning of the EIS process, FHWA and ADOT have been carrying out cultural resources studies and engaging in ongoing, open consultation with Community government officials, the THPO, the Cultural Resource Management Program, many different tribal authorities, and SHPO. The consultation has resulted in concurrence from the THPO and the SHPO on NRHP-eligibility recommendations (including TCPs), project effects, and proposed mitigation and measures to minimize harm. This consultation has been ongoing and will continue until all commitments in the ROD are completed. These proposed mitigation measures and measures to minimize harm accommodate and preserve (to the fullest extent possible from the available alternatives) access to the South Mountains for religious purposes. For additional detail, see the section, Project Commitments, on page 37.

With regard to impacts on places of spiritual importance to certain population segments, such as the South Mountains TCP, that raise potential environmental justice concerns with respect to Native American Tribes, in particular, the Community, extensive consultation, avoidance alternatives analyses, and mitigation measures are discussed throughout the FEIS. A sampling of these efforts is noted on page 4-38 of the FEIS. Even if one

were to reach a contrary conclusion and determine that disparate adverse impacts will occur as a result of the Selected Alternative, there is substantial justification for the 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, *Purpose and Need*, of the FEIS). There is no feasible and prudent alternative to the use of the South Mountains, as discussed in Chapter 5, *Section 4(f) Evaluation*, of the FEIS. All populations will benefit from the Selected Alternative's implementation through improved regional mobility and reduced local arterial street traffic.

Air Quality

ADOT and FHWA received more public comments related to air quality than on any other single issue. Early in the EIS process, members of the public informed ADOT and FHWA that air quality was an area of major concern. In response, the original draft of the DEIS, prepared in 2006, included one of the first MSATs analyses conducted for any highway project in the country. It also included more extensive background discussion on air toxics and other air pollutants than is typically incorporated in a NEPA document.

The DEIS was published in 2013. In addition to the MSAT emissions analysis, it included a CO hot-spot analysis, comparing concentrations of CO near the highway with EPA's standards for this pollutant; a qualitative discussion of likely impacts on EPA's PM_{10} standard; and an analysis of the project's likely impact on statewide greenhouse gas emissions (the first time that this type of analysis had been conducted for a highway project in Arizona).

In response to the many comments on air quality submitted on the DEIS, significant upgrades were made to the air quality analysis for the FEIS. The MSAT emissions analysis and CO hot-spot analysis were updated with EPA's newer MOVES emissions model, even though this was not required (the project qualifies for an EPA grace period for use of the older MOBILE6.2 model relied on in the DEIS). The

qualitative PM_{10} hot-spot analysis was replaced with a modeled PM_{10} hot-spot analysis, the first time this had been completed for any highway project in the United States, and also not required (because of the same EPA grace period). In response to comments about health impacts, FHWA developed a summary of past health risk assessments for highway projects and presented this information in the FEIS (again, a first for any highway project in the United States), and the FEIS also includes a new discussion of children's health impacts.

Finally, development of the new PM_{10} analysis included extensive consultation with EPA, involving discussion of and concurrence on many technical issues and EPA's review of draft documents and modeling files. In August 2014, EPA confirmed that all of its comments on this analysis had been addressed.

In short, this project has undergone an unprecedented amount of air quality analysis and coordination with EPA, far beyond any project of a similar size in the Phoenix metropolitan region. The findings of these analyses are summarized below.

Criteria Pollutants (Carbon Monoxide, Particulate Matter, and Ozone)

EPA has established NAAQS for six "criteria" pollutants: CO, particulate matter ($PM_{2.5}$ and PM_{10}), ozone (O₃), nitrogen dioxide, sulfur dioxide, and lead. These standards are required by law to protect public health, including sensitive populations such as children and the elderly, with an adequate margin of safety. Analysis of these pollutants for highway projects is governed by the Clean Air Act transportation conformity requirements and EPA's transportation conformity regulations. The Clean Air Act and EPA's regulations require projects to demonstrate that they will not contribute to any new local violations of the NAAQS, increase the frequency or severity of any existing violation, or delay timely attainment of the NAAQS or any required interim emissions reductions or other milestones. For the South Mountain Freeway project, these regulations required a project-specific analysis for CO and PM₁₀ and compliance with regional emissions requirements for O_2 .

The roadside CO and PM₁₀ analyses used the latest traffic estimates and emissions and pollutant dispersion models and were reviewed by EPA. The FEIS includes analysis at three different locations along the proposed project (I-10 interchange, Broadway Road interchange, and 40th Street interchange), including worst-case locations based on traffic volumes, and additional locations to ensure coverage of all areas along the corridor. All locations meet the PM₁₀ NAAQS and are well below the CO NAAQS, and the receptor diagrams in Figure 22 show that concentrations decrease rapidly as distance from the roadway increases. At the worst-case locations, nearly all of the concentrations reported are attributable to background concentrations; at the location with the absolute highest concentration for PM₁₀, 145 micrograms per cubic meter is the background concentration and only 3.8 micrograms per cubic meter will be added by the project. The modeling results also seem reasonable compared with real-world air quality monitoring. ADEQ's Greenwood monitoring station is located near the interchange of I-10 and I-17 in central Phoenix, one of the highest-traffic locations in Arizona, and it is recording values that demonstrate attainment of the CO and PM₁₀ NAAQS. For O₃, MAG has included the project in the regional emissions analysis for its longrange transportation plan and has complied with all tests related to compliance with standards for O₃ and the other applicable pollutants.

Therefore, using the latest EPA-approved models and procedures, and after undergoing EPA review, FHWA has identified no health impacts from the proposed project related to the NAAQS.

Mobile Source Air Toxics

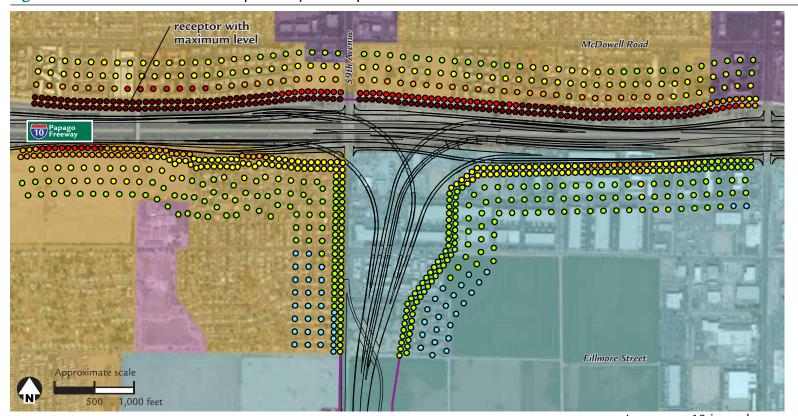
Unlike the criteria pollutants, there are no NAAQS for MSATs. While the NAAQS in the Phoenix area are associated with short-term exposure (8 hours for CO and O₃, 24 hours for PM₁₀), EPA's risk estimates for MSATs are based on 70-year lifetime exposure. Because of this, FHWA analyzes changes in MSATs emissions for a study area consisting of the roadway in question plus all other roadways where traffic is affected by the proposed

project. As explained in the FEIS, this is the best way to estimate changes in 70-year lifetime exposure, as opposed to looking at changes immediately adjacent to the roadway, as was done for CO and PM₁₀. (While it is reasonable to assume that someone may be located at one spot next to a roadway for 8 hours or 24 hours, it is not likely that he or she will be at one spot next to a roadway 24 hours a day for 70 continuous years.)

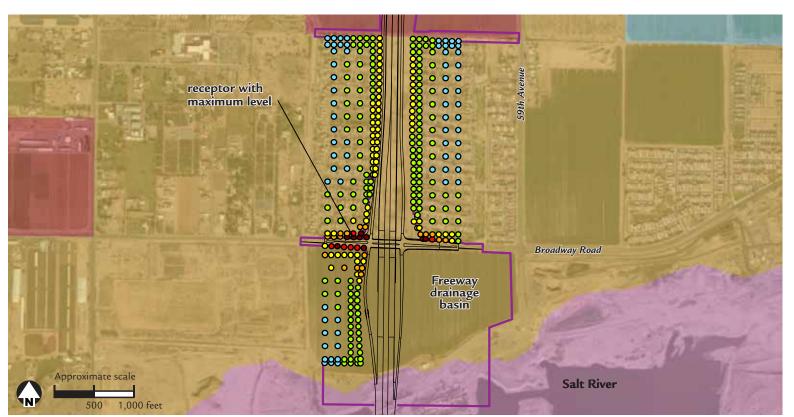
The MSATs analysis showed that emissions will decline dramatically over time regardless of which alternative is selected. Specifically, emissions in the Study Area are projected to decline by 83.98 percent between 2012 and 2035 if the project is built, and by 84.03 percent if the project is not built. While emissions will increase along the project corridor under the Selected Alternative (compared with the No-Action Alternative), they will also decrease elsewhere in the Study Area, offsetting most of the increase. The Traffic Overview report includes tables of traffic volume changes on existing regional freeways and arterial streets; nearly all locations show a decrease in traffic volumes under the Selected Alternative, which would lead to a decrease in congestion and MSATs emissions at those locations. But while there will be increases in emissions in some specific locations and decreases in emissions at others, there is virtually no change in emissions in the larger geographic area that applies for assessing 70-year lifetime MSATs exposure risk.

Finally, since some commenters are still concerned about the health risks from the proposed freeway, the FEIS includes a summary of health risk studies for past highway projects. Even assuming long-term continuous exposure at a fixed location (30 years in one study, 70 years in the other three studies), the estimated cancer risk ranged from 0.08 to 2 cases per million people. EPA considers a cancer risk of 1 in a million to be negligible; EPA has established an "action level" of 100 in a million, above which actions are considered appropriate to reduce risk. (For example, EPA's national emissions standards for industrial benzene sources are designed to reduce risk to a level of no more than 100 in a million.) By comparison, the lifetime risk of cancer from any cause is

Figure 22 Particulate Matter Hot-spot Analysis Receptor Locations and Maximum Levels



Interstate 10 interchange



Broadway Road interchange



40th Street interchange

- Gila River Indian Community boundary
- ---- W59 Alternative right-of-way
 - E1 Alternative right-of-way
- —— Proposed alignment interchange

Receptor Location and Maximum PM_{10}^{a} Level $(\mu g/m^3)^b$

- \circ 0.00–1.00 µg/m³
- $1.01-2.00 \, \mu g/m^3$
- $2.01-3.00 \, \mu g/m^3$
- $3.01-4.00 \, \mu g/m^3$
- $4.01-5.00 \,\mu g/m^3$
- >5.01 μ g/m³

Future Land Use

- Agricultural
- Commercial
- ____ Industrial
- . . .
- Mixed use
- Public/Quasi-public
- Residential
- ^a particulate matter of 10 microns or less in diameter ^b micrograms per cubic meter

about 330,000 in a million, and the lifetime risk of being killed in a traffic accident is about 7,400 in a million. The worst lifetime cancer risk estimated in any of the highway studies (2 in a million) is about the same as the risk of a fatal accident during 180 miles of driving, which many people accumulate in less than a week.

In summary:

- ➤ All of the NAAQS that EPA required FHWA to evaluate are met in the vicinity of the project.
- ➤ MSATs emissions decline dramatically over the life of the project, and there is almost no difference between the alternatives.
- ➤ Even assuming unreasonable exposure timeframes, the potential health risk from MSATs borders on negligible, as defined by EPA.

Conformity with Air Quality Plans

The project area lies within the boundaries of the Phoenix nonattainment area for the NAAQS criteria pollutants O_3 and PM_{10} , and the Phoenix maintenance area for the NAAQS criteria pollutant CO (see Figure 23).

The air quality effects of the Selected Alternative are described beginning on page 4-69 of the FEIS.

A project-level conformity determination was made in the FEIS (see page 4-87), released on September 26, 2014. In accordance with the transportation conformity rule at 40 C.F.R. § 93.104(d), FHWA/Federal Transit Administration projects must be found to conform prior to being adopted, accepted, approved, or funded. Project-level conformity does not need to be redetermined unless one of the following occurs: there is a significant change in the project's design concept and scope, 3 years have elapsed since the most recent major step to advance the project, or a supplemental EIS is initiated for air quality purposes. None of those cases apply here. Therefore, consistent with the transportation conformity regulations, project-level conformity was made in the FEIS and it does not need to be redetermined in the ROD.

On December 23, 2014, the U.S. Court of Appeals for the District of Columbia Circuit issued a ruling on a challenge brought by the Natural Resources Defense Council to EPA's regulations implementing the 2008 O₃ NAAQS. Part of those regulations revoked the 1997 O₃ standard for transportation conformity purposes, thereby providing that transportation conformity no longer needed to be determined for the 1997 O₃ standard after July 20, 2013. In its decision, the Court vacated that portion of the regulation that had revoked transportation conformity requirements for the 1997 O₃ standard. However, the decision did not affect the project-level conformity determination that was made in September 2014.

As discussed in the FEIS project-level conformity determination, since O_3 is a regional pollutant, the analysis is done as part of regional air quality conformity. The regional conformity analysis, which includes the South Mountain Freeway, was most recently updated in January 2014. There are no additional project-level requirements to analyze potential impacts and no possibility of localized violations of O_3 occurring under the transportation conformity regulations at O_3 and O_3 are O_3 are O_3 are O_3 and O_3 are O_3 and O_3 are O_3 are O_3 are O_3 are O_3 are O_3 are O_3 and O_3 are O_3

The CO and PM₁₀ hot-spot analyses demonstrated that the Selected Alternative will not contribute to any new local violations, increase the frequency or severity of any existing violation, or delay timely attainment of the NAAQS or any required interim emissions reductions or other milestones.

The project is included in MAG's fiscal year 2014-2018 Transportation Improvement Program and the 2035 RTP, which were found to conform to the O₃, CO, and PM₁₀ State Implementation Plan by the U.S. Department of Transportation on February 12, 2014. The project is identified in these documents using several different project identification numbers by construction segment (47518, 43086, 43087, 11305, 15671, 19029, 17193, 6458, 1790, 6919, and 47857). The design concept and scope of the Selected Alternative is consistent with that used in the regional emissions

analysis for the RTP and Transportation Improvement Program conformity determinations.

The project contractor shall comply with all local ${\rm PM}_{10}$ air quality and dust control rules, regulations, and ordinances referenced in the State Implementation Plan that apply to any work performed pursuant to the contract.

In response to EPA's comments on the FEIS, FHWA is clarifying that since the 40th Street interchange location was found to have the highest total PM₁₀ concentrations, when combining project-level impacts and background concentrations, it is also being analyzed for conformity purposes, not solely for NEPA purposes as stated in the FEIS. All of the locations analyzed (I-10, 40th Street, and Broadway Road), resulted in total concentrations below the NAAQS, so this clarification requested by EPA does not affect the project's conformity determination.

Therefore, FHWA finds that the project-level conformity determination was made in the FEIS and does not need to be redetermined in the ROD.

Agency and Tribal Coordination

Since the beginning of the EIS process, FHWA and ADOT completed cultural resources studies and engaged in ongoing, open consultation with the Community THPO and other interested Tribes regarding the identification and evaluation of places of religious and cultural importance to the Tribes that may be adversely affected by the proposed freeway. As determined through consultation and studies conducted by the Community's Cultural Resource Management Program, the Community has identified TCPs that are eligible for listing in the NRHP and that could be affected by construction of the Selected Alternative. The other Tribes concurred with the determinations of project effect, NRHP eligibility, and management recommendations. In certain cases, listing these properties on the NRHP may afford them protection under Section 4(f). Through consultation, it was

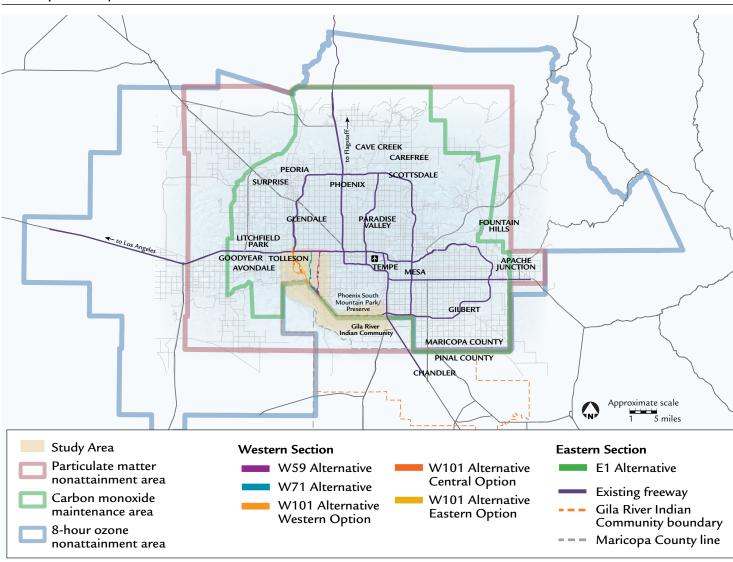


Figure 23 Nonattainment and Maintenance Areas for Particulate Matter^a, Carbon Monoxide, and Ozone, Maricopa County

Source: Arizona Department of Environmental Quality, 2015

determined that the TCPs identified are culturally important to other Native American Tribes as well.

FHWA and ADOT provided equal access to the public participation process to the Community and its members. FHWA and ADOT solicited input from the Community and other Native American Tribes and tribal members and fully considered input and comments that were received.

Chapter 2, Gila River Indian Community Coordination, of the FEIS is dedicated to explaining the Community outreach undertaken for the project. Chapter 6, Comments and Coordination, of the FEIS further describes Community outreach throughout the process. The 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 that disparate or disproportionate

and highly adverse impacts will not result from construction and operation of the Selected Alternative.

In addition, FHWA and ADOT have coordinated with the appropriate resource and jurisdictional agencies to comply with environmental regulations governing the quality of the human environment as codified in 42 U.S.C. § 4332 and 40 C.F.R. Part 1501. Chapter 6 of the FEIS describes agency coordination that has occurred for the project.

Farmland Protection Policy Act

The Farmland Protection Policy Act of 1981 (FPPA) (7 U.S.C. Chapter 73 §§ 4201–4209), administered by the Natural Resources Conservation Service (NRCS), states that the purpose of the Act is "to minimize the extent to which Federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses …" In addition, the FPPA states that federal programs shall be administered in a manner that, as practicable, will be compatible with State and local government and private programs and policies to protect farmland. Coordination with NRCS is necessary when prime and unique farmlands will be affected.

The Selected Alternative will not convert the least amount of farmland to transportation use; however, the Selected Alternative will closely follow the freeway alignment as it has been planned for over 20 years. Much of the Western Section of the Study Area features commercial and industrial land uses (more compatible with a freeway use). As a result, the impacts on prime and unique farmlands from the Selected Alternative will be negligible. Coordination with the NRCS has been conducted since the initiation of the EIS process.

Executive Order on Floodplain Management

The Executive Order requires that impacts on floodplains be evaluated for all federal actions and directs agencies to reduce impacts on floodplains, minimize flood risks on human safety and well-being, and restore and preserve floodplain values. Floodplains are delineated and managed by the Federal Emergency

^a particulate matter of 10 microns or less in diameter

Management Agency. A floodplain is land subject to periodic flooding from an adjacent body of water. FHWA policies and procedures for the location and hydraulic design of encroachments on floodplains are set forth in 23 C.F.R. § 650.

The Selected Alternative will affect floodplains. Two 100-year floodplains will be affected: one associated with the Salt River and one north of the Roosevelt Irrigation District canal. However, impacts on the overall natural and beneficial values of the floodplain will be negligible. Impacts from floodplain encroachment by the Selected Alternative will be effectively mitigated through an elevated crossing (on piers) of the floodplain, using appropriate bridge design.

16. CONCLUSIONS

Based on the evaluation of information presented above and in the FEIS, the project's purpose and need, input from the public on the DEIS and FEIS, and interagency and tribal coordination, FHWA has decided to identify the W59/E1 Alternative as the Selected Alternative. The Selected Alternative will meet the project needs as well as or better than the other alternatives. The Section 4(f) evaluation demonstrated that no feasible and prudent avoidance alternatives to use of the South Mountains' Section 4(f) resources are available. Direct use of the resource is the same regardless of the combination of action alternatives in the Western and Eastern Sections (representing a range of reasonable alternatives). Relative to other action alternatives considered, the Selected Alternative will have similar environmental effects on natural resources, cultural resources, hazardous materials, and noise; will displace fewer residences; will have the lowest impact on total tax revenues of local

governments; will have lower construction costs; will cause less construction disruption overall to I-10 (Papago Freeway); will include measures to reduce impacts and minimize harm; represents all possible planning to minimize harm to resources afforded protection under Section 4(f); is favored by the majority of local governments; and will allow regulatory permitting requirements to be met. FHWA, in consultation with ADOT, arrived at this decision based on information presented in the FEIS and the factors and commitments presented above.

FHWA selects the Preferred Alternative (W59/E1 Alternative) for the South Mountain Freeway (Loop 202) project. FHWA finds that ADOT has incorporated all practicable measures to minimize environmental harm into the project. FHWA and ADOT will ensure that the commitments outlined herein and in the FEIS will be implemented as part of the project design, construction, and postconstruction monitoring.