

South Mountain Freeway (Loop 202)

Interstate 10 (Papago Freeway) to Interstate 10 (Maricopa Freeway)

Record of Decision

Volume I: Main Text



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Record of Decision

March 2015

Decision

The Federal Highway Administration (FHWA) has decided to identify the Preferred Alternative analyzed in the *South Mountain Freeway (Loop 202) Final Environmental Impact Statement and Section 4(f) Evaluation* (FEIS) as the Selected Alternative for the South Mountain Freeway project in Maricopa County, Arizona. The Selected Alternative (a combination of the W59 and E1 Alternatives), shown in Figures 15 and 16, discussed in this record of decision (ROD) is the environmentally preferable 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 Interstate 10; 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.

This decision is based on an evaluation of information presented in the FEIS and errata, the project's purpose and need, input from the public, and interagency and tribal coordination. Approximately 250 comments were received on the FEIS and errata during the review period. The Notice of Availability of the FEIS and errata appeared in the *Federal Register* on September 26, 2014, and December 5, 2014, respectively. The public comments and FHWA and Arizona Department of Transportation responses to public comments are included in this ROD. Additional rationale for the decision to proceed with the Selected Alternative are presented in this ROD.



Karla S. Petty
Arizona Division Administrator
Federal Highway Administration

 March 5, 2015
Date of Approval

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CONTENTS

Volume I: Main Text

<i>Title Page</i>	<i>i</i>		
<i>Glossary</i>	<i>v</i>		
<i>Abbreviations and Acronyms</i>	<i>viii</i>		
1. Introduction	1		
2. Purpose and Need	2		
3. Alternatives	4		
Alternatives Development and Screening Process Described	4		
Alternatives and Design Options Eliminated from Further Study during the Screening Process	5		
Alternatives Eliminated from Further Study in the FEIS	14		
Alternatives Studied in Detail in the DEIS and FEIS	14		
Ability of Alternatives to Meet the Project Purpose and Need	17		
Rationale for Decision	17		
Selected Alternative (Preferred Alternative)	25		
Effects of the Selected Alternative Compared with the Others	33		
Feasibility of Obtaining Required Permits	34		
4. Measures to Minimize Harm	34		
5. Treatment of Resources Afforded Protection under Section 4(f) – at the FEIS Stage	35		
6. Project Commitments	37		
7. Monitoring and Enforcement	37		
8. Permits and Approvals	48		
9. Public Outreach and Comments Received on the FEIS and Errata	48		
Final Environmental Impact Statement Availability	48		
Errata to the Final Environmental Impact Statement	48		
Gila River Indian Community Outreach	49		
Public Comments	49		
10. Statute of Limitations	58		
11. Design Phase	58		
12. Construction	58		
13. Postconstruction	58		
14. Determinations and Findings	58		
15. Environmentally Preferable Alternative	58		
Clean Water Act	59		
National Historic Preservation Act, Section 106	59		
Department of Transportation Act of 1966, Section 4(f)	59		
Land and Water Conservation Fund Act (LWCFA), Section 6(f)	61		
Endangered Species Act	61		
Roadway Effects on Sonoran Desert Habitat	62		
		Habitat Connectivity	62
		Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970	63
		Executive Order on Environmental Justice	63
		Title VI of the Civil Rights Act of 1964	64
		Air Quality	65
		Conformity with Air Quality Plans	68
		Agency and Tribal Coordination	68
		Farmland Protection Policy Act	69
		Executive Order on Floodplain Management	69
		16. Conclusions	70
		17. Bibliography/References	71
		Volume II	
		Appendix A Comments on the South Mountain Freeway Final Environmental Impact Statement and Section 4(f) Evaluation and Errata	
		Volume III	
		Appendix B Final Environmental Impact Statement and Errata Public Outreach	
		Appendix C Gila River Indian Community Public Forum	
		Appendix D Record of Decision Supporting Documents	

Figures

Figure 1	Study Area	1
Figure 2	The Maricopa Association of Governments Regional Freeway and Highway System, 1985 and 2003	3
Figure 3	Growth Distribution	4
Figure 4	Alternatives Development and Screening Process	5
Figure 5	Corridor Locations, Alternatives Development and Screening Process	6
Figure 6	Riggs Road Alternative	7
Figure 7	SR 85/I-8 Alternative	7
Figure 8	Early Alignment Siting Efforts, Alternatives Development and Screening Process	8
Figure 9	Western and Eastern Section Alternatives, Alternatives Development and Screening Process	9
Figure 10	Western Section Alternatives Eliminated from Further Study, Alternatives Development and Screening Process	11
Figure 11	Eastern Section Alternatives Eliminated from Further Study, Alternatives Development and Screening Process	11
Figure 12	Alignment and Design Adjustments, Alternatives Development and Screening Process	13
Figure 13	Action Alternatives	16
Figure 14	Typical Eight-lane Freeway Section with Potential Drainage Basin	26
Figure 15	W59 Alternative (Selected Alternative), Horizontal and Vertical Alignments	27
Figure 16	E1 Alternative (Selected Alternative), Horizontal and Vertical Alignments	28
Figure 17	Local Access Modifications, Service Traffic Interchanges, W59 Alternative (Selected Alternative), Western Section	30
Figure 18	Local Street Realignments, W59 Alternative (Selected Alternative), Western Section	31
Figure 19	Local Street Realignments, E1 Alternative (Selected Alternative), Eastern Section	32
Figure 20	Sovereign Nation and Section 4(f) Constraints, Action Alternatives	36
Figure 21	Photo Simulation, View from Bursera Trail to South Mountain Freeway	60
Figure 22	Particulate Matter Hot-spot Analysis Receptor Locations and Maximum Levels	67
Figure 23	Nonattainment and Maintenance Areas for Particulate Matter, Carbon Monoxide, and Ozone, Maricopa County	69

Tables

Table 1	Alternatives and Design Options Eliminated from Further Study during the Screening Process	6
Table 2	Environmental Factors Accounted for in the Decision	18
Table 3	Commitments and Mitigation Measures	38

GLOSSARY

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.	design year	The future year used to determine the probable traffic volume for which a highway and noise abatement are designed.
Arizona Department of Environmental Quality (ADEQ)	The State agency responsible for ensuring that the quality of Arizona’s air, land, and water resources meets healthful, regulatory standards.	Eastern Section	The portion of the Study Area located east of the common point, which is a line perpendicular to the Gila River Indian Community boundary through a point located near Elliot Road and 59th Avenue (see Figure 13).
Arizona Department of Transportation (ADOT)	The State agency responsible, among other things, for state roads and highways.	elderly	Those persons age 60 and older.
arterial	A through-road or street.	elevated roadway	A roadway constructed above the immediate surrounding terrain, either on an embankment or a structure.
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.	emission	A substance discharged into the air, for the purposes of this document, particularly by an internal combustion engine.
at-grade roadway	A roadway element that is approximately level with the immediate surrounding terrain.	endangered species	Any plant or animal species that is in danger of extinction throughout all or a significant portion of its range.
barrier	A solid wall or earth berm located on a direct line between the roadway and noise receiver location that reduces the noise level at the receiver. Some material that blocks or is intended to block passage, or a natural formation or structure that prevents or hinders movement or action.	environmental impact statement (EIS)	The project documentation prepared in accordance with the National Environmental Policy Act when a project is anticipated to have a significant impact on the environment.
Black/African American	A person having origins in any of the black racial groups of Africa.	Federal Highway Administration (FHWA)	The branch of the U.S. Department of Transportation responsible for administering the Federal-aid Highway Program and the Federal Lands Highway Program. The programs provide financial resources and technical assistance for constructing, preserving, and improving the National Highway System along with other urban and rural roads.
blasting	The controlled use of explosives to excavate or remove rock.	fill	Earth used to create embankments or to raise low-lying areas to bring them to grade.
buffer	An area designed to separate a resource from an undesired effect.	floodplain	The portion of a stream valley, adjacent to the channel, that is covered with water when the stream overflows its banks at flood stage.
capacity	The maximum number of vehicles that a given section of road or traffic lane can accommodate.	geotechnical	Referring to the use of scientific methods and engineering principles to acquire, interpret, and apply knowledge of earth materials for solving engineering problems.
carbon monoxide (CO)	An odorless, colorless gas that is a product of the combustion of hydrocarbons; it interferes with the body’s organs and tissues.	groundwater	Water that collects or flows beneath the Earth’s surface, filling the porous soil, sediment, and rocks.
citizens advisory team	A group of volunteers that meets regularly and acts as a sounding board to help the project team understand issues and concerns of their respective communities and to help find a consensus solution for the project.	habitat	Place where an animal or plant normally lives, often characterized by a dominant plant form or physical characteristic.
community character	A set of parameters that creates a “sense of place” within a community. Factors contributing to community character are physical size, compatible land uses within the community, internal circulation, distinct but common architecture, and cultural activities.	Hispanic/Latino	Of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.
community cohesion	The dynamic within a community that promotes internal neighborhood circulation to and from residences and community facilities, quasi-public facilities, and regularly required activities such as food shopping at local grocery stores.	household	A social unit consisting of those living together in the same dwelling.
congestion	Traffic volume on a road at sufficient densities to become detrimental to its performance; undesirable traffic conditions that exist when traffic on a freeway or street is moving at an average speed of 45 miles per hour or less, and/or the traffic flow is often stop and go.	impact	A direct or indirect consequence of the construction or operation of a proposed alternative, including the No-Action Alternative, on the environment in the Study Area; can be negative, positive, or neutral.
cooperating agency	Another agency—federal, state, or local—that has jurisdiction by law or special expertise over portions of the project area and that must make a decision on the proposed project.	independent utility	The ability of the proposed action to function as proposed, independent of other planned transportation-related projects in the region.
critical habitat	Critical habitat is defined in Section 3(5)(A) of the Endangered Species Act. Critical habitat consists of specific geographic areas that contain features essential to the conservation of a species and that may require special management or protection.	jurisdiction	Refers to the territory over which authority is exercised.
		level of service (LOS)	The operating performance of an intersection or roadway segment can be described using the term <i>level of service</i> . Level of service is a qualitative description of operation based on the degree of delay and maneuverability.
		listed species	Any species of fish, wildlife, or plant that has been determined to be endangered or threatened under Section 4 of the Endangered Species Act.

logical termini	Rational end points for a transportation project and for a review of environmental impacts.	overpass	A grade separation, usually a bridge, where the freeway passes over the cross street or rail line.
low-income	Populations in households with an income at or below the U.S. Department of Health and Human Services poverty guidelines.	ozone (O₃)	A molecule consisting of three atoms of oxygen. It is a criteria pollutant that can develop when oxides of nitrogen, volatile organic compounds, and sunlight interact in the lower atmosphere. Ozone is a powerful oxidizing agent that damages tissues in living organisms.
minority populations	In the United States, people who identify themselves as Hispanic, Latino, Black, African American, American Indian, Alaskan Native, Asian American, another race other than Caucasian, or more than one race.	particulate matter (PM₁₀)	Particulate matter of 10 microns or less in diameter.
mitigation	An action taken to reduce or eliminate an adverse impact stemming from construction, operation, or maintenance of a proposed action alternative. Mitigation could reduce the magnitude and extent of an impact from a level of significance to a level of insignificance. Mitigation includes: <i>Avoiding</i> the impact altogether by not taking a certain action or parts of an action. <i>Minimizing</i> impacts by limiting the degree of magnitude of the action and its implementation. <i>Rectifying</i> the impact by repairing, rehabilitating, or restoring the affected environment. <i>Reducing</i> or eliminating the impact over time by preservation and maintenance operations during the life of the action. <i>Compensating</i> for the impact by replacing or providing substitute resources or environments.	population	All the organisms living in a given area; a group of individuals.
		prime farmland	Land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed, and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides, and labor, and without intolerable soil erosion.
		prior rights	As used in this document, prior rights refer to a situation involving a utility company that has facilities located on private easements that are later acquired or encompassed by the State's right-of-way. In this situation, the utility is given a choice of relocating its conflicting facilities onto a public right-of-way or of acquiring a new easement and relocating onto it. Either would be at the Arizona Department of Transportation's expense.
		project sponsor	An individual, agency, or group who lends support to the project by advocacy and/or financial means.
National Ambient Air Quality Standards (NAAQS)	Standards set by the U.S. Environmental Protection Agency to protect public health and welfare. These standards are set for pollutant concentrations that states, cities, and towns must meet by specified deadlines.	prudent and feasible	This concept is essential to the Section 4(f) of the Department of Transportation Act of 1966 process. It refers to how practical an alternative is in its attempt to avoid the use of a Section 4(f) resource. The term <i>feasible</i> refers to whether a project can be built using current construction methods, technologies, and practices. The term <i>prudent</i> refers to how reasonable and responsible the alternative is. The Arizona Department of Transportation is obligated to choose an avoidance alternative only if it is prudent and feasible.
National Environmental Policy Act (NEPA) of 1969	The federal law, enacted in 1970, that established a national policy for the environment and requires federal agencies to become aware of the environmental ramifications of their proposed actions, to fully disclose to the public proposed federal actions, to provide a mechanism for public input to federal decision making, and to prepare environmental impact statements for every major action that would significantly affect the quality of the human environment.	reasonable alternatives	Feasible options for a proposed action.
National Historic Preservation Act of 1966 (NHPA)	The primary federal law pertaining to the protection of historic and prehistoric resources.	receiver	The location at which noise levels are measured, modeled, and analyzed. Receivers of interest are typically residences, schools, parks, or other noise-sensitive land uses.
National Register of Historic Places (NRHP)	The nation's official list of cultural resources worthy of preservation. Authorized under the National Historic Preservation Act of 1966, the National Register of Historic Places is part of a program to coordinate and support public and private efforts to identify, evaluate, and protect historic and prehistoric resources. Properties listed in the National Register of Historic Places include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and culture.	right-of-way (R/W)	Publicly owned land used or intended to be used for transportation and other purposes.
native	An indigenous person, plant, or animal.	rolling profile	A roadway that follows the land contour and is not flat. Slight crests and sags in the roadway help avoid concentrated stormwater drainage and assist in making travel interesting for drivers, thus improving safety. Such a road profile helps to cost-effectively balance the import and export of fill material and to minimize the amount of land that must be acquired.

Section 106 of the National Historic Preservation Act of 1966 (NHPA)	Under Section 106 of the National Historic Preservation Act of 1966, federal agencies are required to identify and evaluate historic and prehistoric resources and consider the impact of undertakings they fund, license, permit, or assist on historic and prehistoric properties eligible for inclusion in the National Register of Historic Places. The federal agencies must allow the State Historic Preservation Office and the Advisory Council on Historic Preservation the opportunity to comment on these undertakings.	system traffic interchange	A traffic interchange connecting two or more freeway facilities and allowing for uninterrupted traffic flow as motorists move from one facility to another.
Section 4(f) of the Department of Transportation Act of 1966	A later amendment to the Department of Transportation Act of 1966 stipulating that the Federal Highway Administration and other departments of transportation using federal funds cannot approve the use of land from a significant publicly owned public park, recreation area, wildlife or waterfowl refuge, or any significant cultural resource unless there is no prudent and feasible alternative to the use of that land and unless the action includes all possible planning to minimize harm to the property resulting from its use.	threatened species	Any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.
service traffic interchange	A traffic interchange connecting a freeway facility and a cross street—it typically features traffic signals to regulate traffic flow.	transportation demand management (TDM)	A general term for strategies that encourage more efficient use of existing transportation resources.
socioeconomic	Of, relating to, or involving a combination of social and economic factors.	transportation system management (TSM)	Fundamental traffic engineering actions taken to improve the operation of the highway system to help reduce congestion.
State Historic Preservation Office/Officer (SHPO)	The State Historic Preservation Officer is appointed by the governor to head the State Historic Preservation Office. The agency provides project review and oversees compliance with Section 106 of the National Historic Preservation Act of 1966. The U.S. Department of Transportation generally uses the Section 106 process as a method for determining National Register of Historic Places eligibility and for determining a cultural resource's significance for a federal undertaking under Section 4(f).	unique farmland	Land other than prime farmland that is used for the production of specific high-value food and fiber crops, such as citrus, tree nuts, olives, cranberries, fruits, and vegetables.
State Implementation Plan	The document prepared by the Arizona Department of Environmental Quality detailing for the U.S. Environmental Protection Agency the actions the State of Arizona will take to attain compliance with the National Ambient Air Quality Standards.	U.S. Department of Transportation	The agency responsible for transportation issues in the federal government. It consists of many agencies providing transportation services to the public, including the Federal Highway Administration and the Federal Aviation Administration.
Study Area	Boundary of area evaluated for the South Mountain Freeway Environmental Impact Statement and Section 4(f) Evaluation.	use	A “use” of a Section 4(f) resource, as defined in 23 Code of Federal Regulations § 774.17, occurs 1) when land is permanently incorporated into a transportation facility, 2) when there is a temporary occupancy of land that is adverse in terms of the statute’s preservationist purpose, or 3) when there is a constructive use of land. A constructive use of a Section 4(f) resource occurs when the transportation project does not incorporate land from the Section 4(f) resource, but the project’s proximity impacts are so severe that the protected activities, features, or attributes that afford a resource protection under Section 4(f) are substantially impaired.
suitable habitat	For any given species, defined as habitat that contains the components (i.e., food, cover, and nesting/breeding sites) required for the survival and reproduction of a species.	utility	An entity that transmits or distributes communication, cable television, electricity, light, heat, gas, petroleum products, water, sewer, waste, or any other similar commodity that directly or indirectly serves the public. For this document, a railroad is considered a utility.
		Western Section	The portion of the Study Area located west of the common point, which is a line perpendicular to the Gila River Indian Community boundary through a point located near Elliot Road and 59th Avenue (see Figure 13).

ABBREVIATIONS AND ACRONYMS

101L	Loop 101	ESA	Endangered Species Act	PM_{2.5}	particulate matter of 2.5 microns or less in diameter
202L	Loop 202	FCDMC	Flood Control District of Maricopa County	PM₁₀	particulate matter of 10 microns or less in diameter
303L	Loop 303	FEIS	Final Environmental Impact Statement	ROD	record of decision
A.A.C.	Arizona Administrative Code	FHWA	Federal Highway Administration	RTP	<i>Regional Transportation Plan</i>
AASHTO	American Association of State and Highway Transportation Officials	FPPA	Farmland Protection Policy Act	R/W	right-of-way
ADA	Arizona Department of Agriculture	HOV	high-occupancy vehicle	SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
ADEQ	Arizona Department of Environmental Quality	HPT	Historic Preservation Team	SHPO	State Historic Preservation Office/Officer
ADOT	Arizona Department of Transportation	HUD	U.S. Department of Housing and Urban Development	SMPP	Phoenix South Mountain Park/Preserve
AGFD	Arizona Game and Fish Department	I-8	Interstate 8	SR	State Route
ASLD	Arizona State Land Department	I-10	Interstate 10	SWPPP	Stormwater Pollution Prevention Plan
ASM	Arizona State Museum	I-17	Interstate 17	TCP	traditional cultural property
AZ	Arizona	IGA	intergovernmental agreement	TDM	transportation demand management
AZPDES	Arizona Pollutant Discharge Elimination System	LOS	level of service	THPO	Tribal Historic Preservation Office/Officer
BIA	U.S. Bureau of Indian Affairs	LWCF	Land and Water Conservation Fund	Title VI	Title VI of the Civil Rights Act of 1964
BLM	Bureau of Land Management	LWCFA	Land and Water Conservation Fund Act	TSM	traffic system management
BMP	best management practice	MAG	Maricopa Association of Governments	Uniform Act	Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970
CEQ	Council on Environmental Quality	MSATs	mobile source air toxics	UPRR	Union Pacific Railroad
C.F.R.	Code of Federal Regulations	NAAQS	National Ambient Air Quality Standards	U.S.	United States
CO	carbon monoxide	NEPA	National Environmental Policy Act	US 60	U.S. Route 60
Community	Gila River Indian Community	NESHAP	National Emissions Standards for Hazardous Air Pollutants	USACE	U.S. Army Corps of Engineers
CPAO	Communications and Public Affairs Office	NHPA	National Historic Preservation Act	U.S.C.	U.S. Code
CWA	Clean Water Act	NPS	National Park Service	USFWS	U.S. Fish and Wildlife Service
DEIS	Draft Environmental Impact Statement	NRCS	Natural Resources Conservation Service	W101	W101 Alternative
Department	U.S. Department of the Interior	NRHP	National Register of Historic Places	W55	W55 Alternative
E1	E1 Alternative	O₃	ozone	W59	W59 Alternative
EIS	environmental impact statement	OHWM	ordinary high water mark	W71	W71 Alternative
EMP	Environmental Management Plan	PA	programmatic agreement	Western	Western Area Power Administration
EPA	U.S. Environmental Protection Agency				
EPG	Environmental Planning Group				