



South Mountain Transportation Corridor Study

Citizens Advisory Team
Draft Technical Report Summary

Cultural Resources

What are cultural resources?

Cultural resources are the prehistoric and historic sites, structures, places, landscapes and objects important to a culture or community for historic, scientific, traditional, religious or other reasons. They are a nonrenewable resource that links us with our past and defines our heritage and social identity at local, state and national levels. Examples of cultural resources identified in the South Mountain Transportation Corridor include prehistoric archaeological sites, historic houses and farms, railroads and irrigation canals.

Cultural resources also include traditional cultural properties (TCPs). TCPs are places considered important for their association with cultural practices or beliefs of a living community that are rooted in that community's history and are important in maintaining the cultural identity of a community. Often, TCPs are culturally important places, but may not be distinguished by physical manifestations resulting from human activity. For example, TCPs could include a location associated with the traditional beliefs of a community regarding its origins or its cultural history, or a location where a particular community has historically gone—and is known to go today—to perform traditional cultural practices.

Why study cultural resources in the Environmental Impact Statement (EIS)?

Cultural resources hold an intrinsic value in that they provide a direct link to the past and help people define and understand their own heritage as well as that of others. Cultural resources provide opportunities for studying and learning how and why our cultures and societies have developed over time. Both the federal government and the State of Arizona acknowledge the importance of Arizona's cultural heritage to its citizens and recognize that physical links to our past should be preserved for future generations. Where preservation is not possible, mitigation of the effects of human activities on these resources is warranted.

The South Mountain Transportation Corridor study is a federal undertaking requiring regulatory compliance with the National Historic Preservation Act (NHPA). Section 106 of the NHPA requires federal agencies to take into account the effects of their activities and programs on cultural resources eligible for listing in the National Register of Historic Places (NRHP). Regulations for Protection of Historic Properties, which primarily implement Section 106, were most recently amended in 2004. These regulations define a process for responsible federal agencies to consult with the state or tribal Historic Preservation Officers, Native American groups, other interested parties and, when necessary, the Advisory Council on Historic Preservation in Washington, D.C. to ensure cultural resources are duly considered as federal projects are planned and implemented.



South Mountain Transportation Corridor Study

Citizens Advisory Team Draft Technical Report Summary

Cultural Resources

To be determined eligible for listing in the NRHP, properties must be important in American history, architecture, archaeology, engineering or culture and meet at least one of the following criteria:

- Criterion A. are associated with events that have made a significant contribution to the broad patterns of our history
- Criterion B. are associated with the lives of persons significant in our past
- Criterion C. embody the distinctive characteristics of a type, period or method of construction or that represent the work of a master, or that possess high artistic values or that represent a significant distinguishable entity whose components may lack individual distinction
- Criterion D. have yielded, or may be likely to yield, information important in prehistory or history

They also must possess integrity of location, design, settings, materials, workmanship, feeling and/or association. Properties may be of local, state or national importance. Typically, historic properties are at least 50 years old, but younger properties may be considered for listing if they are of exceptional importance.

What kind of impacts could occur from construction?

Direct impacts on cultural resources from construction could result in their partial or total loss. By law, adverse impacts on cultural resources determined eligible for listing in the NRHP must be mitigated. The degree of mitigation required is directly related to the historic designation as described by Section 106.

Direct impacts from construction on cultural resources determined to be of religious or traditional cultural importance by Native American groups or others could result in desecration of a sacred place. A potential indirect impact might be a community's loss of access to a culturally important place as a result of construction restrictions.

How do the alternative alignments differ in construction-related impacts?

As shown in the tables, all action alternatives would adversely affect prehistoric and historic cultural resources. The prehistoric sites that have been determined eligible for listing in the NRHP would require mitigation if they were to be affected by construction. The greatest number of prehistoric sites would be impacted by the E1 Alternative, but each is typically small and represents a limited set of activities, such as rock art and resource collecting areas. In contrast, while the Western Section alternatives would affect fewer sites, they include the remains of large prehistoric villages with archaeological deposits, some measuring over a half-mile in diameter. While all alternatives would affect historic sites, most of such sites are not eligible for the NRHP.



South Mountain Transportation Corridor Study

Citizens Advisory Team
Draft Technical Report Summary

Cultural Resources

Archaeological Resources Affected, Action Alternatives

Action Alternatives	Number of Sites Affected	Site Type	NRHP Eligibility Criterion	Mitigation Required
Western Section				
W55	6	1 village site; 5 habitation sites	D	Yes
W71	4	2 village sites; 2 habitation sites		
W101 Western Option	3	2 village sites; 1 habitation site		
W101 Central Option	2	2 village sites		
W101 Eastern Option	2	2 village sites		
Eastern Section				
E1	8	1 artifact scatter (limited activity site); 2 lithic quarries; 1 petroglyph site; 4 trail sites	D	Yes

NRHP-Eligible Historic Properties Affected, Action Alternatives

Action Alternatives	Site Affected	NRHP Eligibility Criterion	Mitigation Required
Western Section			
W55	Roosevelt Canal	A	No
	Historic Southern Pacific Railroad		No
W71	Roosevelt Canal		No
	Historic Southern Pacific Railroad		No
W101 Western Option	Historic Southern Pacific Railroad		No
W101 Central Option			
W101 Eastern Option			
Eastern Section			
E1	Phoenix South Mountain Park/Preserve	A, B, C, D	No



South Mountain Transportation Corridor Study

Citizens Advisory Team
Draft Technical Report Summary

Cultural Resources

All Western Section action alternatives would cross the historic Southern Pacific Railroad (now Union Pacific Railroad), which is NRHP-eligible. Similarly, all Western Section action alternatives would intersect the Roosevelt Canal. The segments of the Roosevelt Canal that would be crossed by the W55 and W71 Alternatives represent the original construction of the canal and contribute to the canal's eligibility. The W101 Alternative and Options would cross canal segments that do not contribute to the canal's eligibility for listing in the NRHP because they are modern realignments.

What kind of freeway operational impacts (postconstruction) could occur?

Continued operation of the freeway could directly impact the availability of access to cultural resources. As a potential cumulative effect, planned growth adjacent to the freeway could impact cultural resources.

What if the project were not constructed?

While freeway construction would have negative impacts to cultural resources, stopping freeway construction would not eliminate the continual loss of cultural properties due to urban development. Unlike certain private sector developers, FHWA and ADOT are required by law to minimize cultural resource impacts through the development of coordinated transportation infrastructure that improves the quality of life while sustaining core cultural and historical values of local communities and constituencies.

Are there any specific and/or unique impacts from implementation of the action alternatives?

Archaeological sites and places considered culturally important by Native American groups would be affected by any of the build alternatives. The Gila River Indian Community (GRIC) and the Salt River Pima-Maricopa Indian Community have both passed Tribal Resolutions designating the South Mountains as a TCP and the Colorado River Indian tribes have said that they also consider the South Mountains a TCP. The Federal Highway Administration (FHWA) and the Arizona Department of Transportation (ADOT) recognize the South Mountains as a TCP, and Section 106 consultations regarding the South Mountains TCP are ongoing.

Further, SMPP is also NRHP-eligible 1) as a historic property for its National Park Service master plan design that set a precedent in planning natural parks and 2) for its associations with Civilian Conservation Corps programs in Phoenix during the Great Depression.

What could be done to reduce or avoid impacts?

Much has already been undertaken to avoid direct impacts on cultural resource sites throughout the Study Area. For example, adjustments to the W55, W71 and W101 Alternatives have been made to avoid such resources. However, it appears that not all cultural sites could be avoided by the action alternatives. ADOT could use a range of activities to mitigate adverse impacts during construction and operation of the freeway (see answers to next question, below).



South Mountain Transportation Corridor Study

Citizens Advisory Team Draft Technical Report Summary

Cultural Resources

The degree and number of adverse impacts on cultural resources could be reduced by minimizing the construction footprint to the greatest extent possible. Impacts on historic buildings could be reduced through relocation of the structures. For cultural resources in the construction footprint that could not be relocated, adverse impacts could be reduced through implementation of mitigation measures, such as archaeological excavations and architectural/engineering documentation prior to construction.

If cultural resources could not be avoided, what is the process for mitigating the adverse impacts?

Specific mitigation strategies would vary depending on the type of cultural resource being treated. For prehistoric sites, work plans and research designs would be developed that identify and describe research questions, methods and excavation strategy to be used for site excavation. In addition, a burial agreement with the Arizona State Museum and concerned Native American tribes would be developed that outlines the procedures for proper and respectful removal, treatment and reburial of any human remains and associated funerary objects that might be encountered.

Mitigation field work is typically performed in two phases. The first phase would involve conducting test excavations of a sample of a site to assess the type, condition and distribution of features present below the ground surface, and in turn, to determine whether a more extensive program of data recovery excavations would be needed. In the Phoenix area, this is typically accomplished by excavating a series of backhoe trenches, sometimes coupled with some limited hand-excavated units (see photo 1). If warranted, a second phase would involve data recovery where large excavation units would be opened over targeted features (see photo 2). Sediments overlaying features may initially be stripped away mechanically. Features would then be hand-excavated in strata.

Mitigation strategies for historic cultural resources can be varied. For historic artifact deposits, such as an historic trash dump, where the cultural material is belowground, a phased mitigation strategy may be used similar to that employed for prehistoric sites. Mitigation for adversely affected historic buildings would typically involve a combination of architectural assessments, historical research and archival-quality photographic documentation. Mitigation for historic structures, such as canals and bridges, involves a similar approach, usually with the preparation of a Historic American Engineering Record which follows the Secretary of the Interior's Standards and Guidelines for Architectural and Engineering Documentation.



South Mountain Transportation Corridor Study

Citizens Advisory Team
Draft Technical Report Summary

Cultural Resources



Photo courtesy of Archaeological Consulting Services Ltd.

Photo 1: Example of Phase I archaeological testing



Photo copyright: Adriel Heisey

Photo 2: Example of Phase II Data Recovery Excavation



South Mountain Transportation Corridor Study

Citizens Advisory Team
Draft Technical Report Summary

Cultural Resources

Are the conclusions presented in this summary final?

The conclusions in this summary are not final. Consultation with Native American communities and the State Historic Preservation Office regarding the evaluation of TCPs in the Study Area is ongoing. In addition, what would be rights-of-way along alignments of the Western Section action alternatives were in alfalfa fields when field-investigated, preventing inspection of the ground surface for cultural resources. Future surveys of these parcels could result in the identification of additional cultural resources sites.

In situations such as this, where comprehensive evaluation of effects of a proposed project on cultural resources could not be fully determined prior to a decision being made on the , project's environmental acceptability, a programmatic agreement (PA) is prepared that specifies steps and procedures that would be undertaken to address any effects as they were to become known. A PA for the South Mountain Freeway study has been developed and executed. To date, this document has been signed by FHWA, the Arizona State Historic Preservation Office, ADOT, Salt River Project, the Maricopa County Department of Transportation, the Flood Control District of Maricopa County, the City of Phoenix, the Arizona State Museum, the Fort McDowell Yavapai Nation, the Tonto Apache Tribe and the Yavapai-Apache Nation.

As a member of the Citizens Advisory Team, how can you review the entire technical report?

The cultural resources technical reports are confidential because of the cultural importance and sensitivity of their content. In accordance with state and federal law, these reports are not available for public review.