

LOOP 202  
*South Mountain*  
Freeway

# South Mountain Freeway FEIS/ROD Reevaluation #9

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in Maricopa County, Arizona



Federal Highway Administration

**ADOT**

Arizona Department of Transportation

**November 6, 2018**

Federal-aid Project Number: NH-202-D(ADY)

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# Record of Decision

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November 6, 2018

The Federal Highway Administration (FHWA), in coordination with the Arizona Department of Transportation (ADOT), reevaluated the South Mountain Freeway, Interstate 10 (I-10, Papago Freeway) to I-10 (Maricopa Freeway) Final Environmental Impact Statement and Record of Decision per 23 Code of Federal Regulations § 771.29 to address adding a traffic interchange (TI) to the project, at 32nd Street, since the approval of the ROD on March 5, 2015. FHWA, with concurrence from ADOT, has determined that no substantial changes have occurred in social, economic, or environmental impacts of the proposed action that would substantially impact the quality of the human, socioeconomic, or natural environment. Therefore, the original environmental document remains valid for the proposed action.

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11/7/18

Date

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Nov. 6, 2018

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## Abbreviation and Acronyms

AADT	Annual Average Daily Traffic
ADOT	Arizona Department of Transportation
ADEQ	Arizona Department of Environmental Quality
BE	Biological Evaluation
BIA	Bureau of Indian Affairs
C202P	Connect 202 Partners
CAT	Citizens Advisory Team
CFR	Code of Federal Regulations
CO	Carbon monoxide
DEIS	Draft Environmental Impact Statement
ESA	Endangered Species Act
FEIS	Final Environmental Impact Statement
FHWA	Federal Highway Administration
FY	fiscal year
GRIC	Gila River Indian Community
HOA	Homeowners' Association
I-10	Interstate 10
ISA	Initial Site Assessment
LOS	Level-of-Service
MAG	Maricopa Association of Governments
MCDOT	Maricopa County Department of Transportation
MSAT	Mobile-Source Air Toxics
MOVES	Motor Vehicle Emissions Simulator
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
PM <sub>10</sub>	particulates 10 microns in diameter or less
POAQCQ	Project of Air Quality Concern Questionnaire
Reclamation	Bureau of Reclamation
ROD	Record of Decision
ROW	Right-of-Way
RTP	Regional Transportation Plan
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SMF	South Mountain Freeway
STIP	State Transportation Improvement Program
TCE	Temporary Construction Easement
THPO	Tribal Historic Preservation Office

TI	Traffic Interchange
TIP	Transportation Improvement Plan
USACE	U.S Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USFWS	U.S Fish and Wildlife Service
VMT	vehicle miles traveled
WAPA	Western Area Power Administration

# 1 Introduction and Project Description

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The Federal Highway Administration (FHWA), in coordination with the Arizona Department of Transportation (ADOT), conducted a reevaluation of the South Mountain Freeway (SMF), Interstate 10 (I-10, Papago Freeway) to I-10 (Maricopa Freeway) Final Environmental Impact Statement (FEIS) and Record of Decision (ROD) per 23 Code of Federal Regulations (CFR) § 771.129 to address adding a traffic interchange (TI) at the freeway's intersection with 32nd Street (see Figure 1-1) since the approval of the ROD on March 5, 2015.

During the development of the Draft Environmental Impact Statement (DEIS) in 2005, it was recommended to remove the proposal to design a TI at 32nd Street and the SMF. Based on the input received from the South Mountain Citizens Advisory Team (CAT) in 2005 and the City of Phoenix, ADOT agreed to no longer study a potential interchange at 32nd Street. In 2006, the City of Phoenix conducted a traffic circulation study to evaluate the impacts of the proposed freeway on the local street system, including the elimination of the TI at 32nd Street. The City of Phoenix study found no adverse effects on the local street system from the freeway with or without an interchange.

After the ROD and prior to construction starting on the project, ADOT and the freeway developer, Connect 202 Partners (C202P) participated in a public input meeting for the freeway in the Ahwatukee Foothills Village. During the fall 2016 meeting, the community, including local and state officials, expressed an interest in re-considering the need for a TI at 32nd Street. The concerns raised by the community included the concern that traffic would increase substantially on Liberty Lane and Lakewood Parkway (both minor collectors) because vehicles currently using 32nd Street would need to get to 24th or 40th streets to access the new freeway and this additional traffic would pass directly by a number of local schools. However, a City of Phoenix traffic analysis completed in 2017 (*Offsite Traffic Analysis Study: Loop 202 and S. Chandler Blvd.*), indicated “there would not be a significant increase in traffic on Liberty Lane (cut-through) because of the elimination of access to the east-west movements from 32nd Street onto the SMF” (see Appendix A).

More recently in 2017 and 2018, the project team has received numerous requests from the local community and schools to revisit construction of a TI at 32nd Street. The study of this TI has also been supported by elected officials and the Maricopa Association of Governments (MAG).

Although the TI would be constructed within approved limits addressed in the FEIS/ROD and subsequent re-evaluations, a drainage easement will be acquired for a culvert extension and a temporary construction easement (TCE) would be needed for sidewalk realignment (see Figure 1-2); both of these features are outside previously approved SMF limits. The new easements would be acquired from the local community's homeowners' association (HOA) common area. The perpetual drainage easement allows ADOT to construct specifically agreed upon structures and allows rights to access and maintain those structures after the project is completed. The underlying fee ownership will remain unchanged.

This reevaluation document provides an overview of the SMF project, describes the environmental consequences of adding a TI at 32nd Street, describes past and future public and agency outreach, and presents a conclusion related to adding the new TI into the SMF project.

## 1.1 Project Location

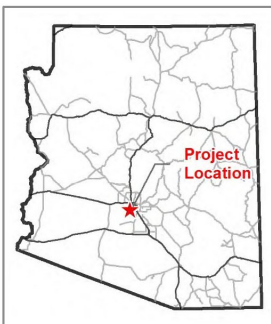
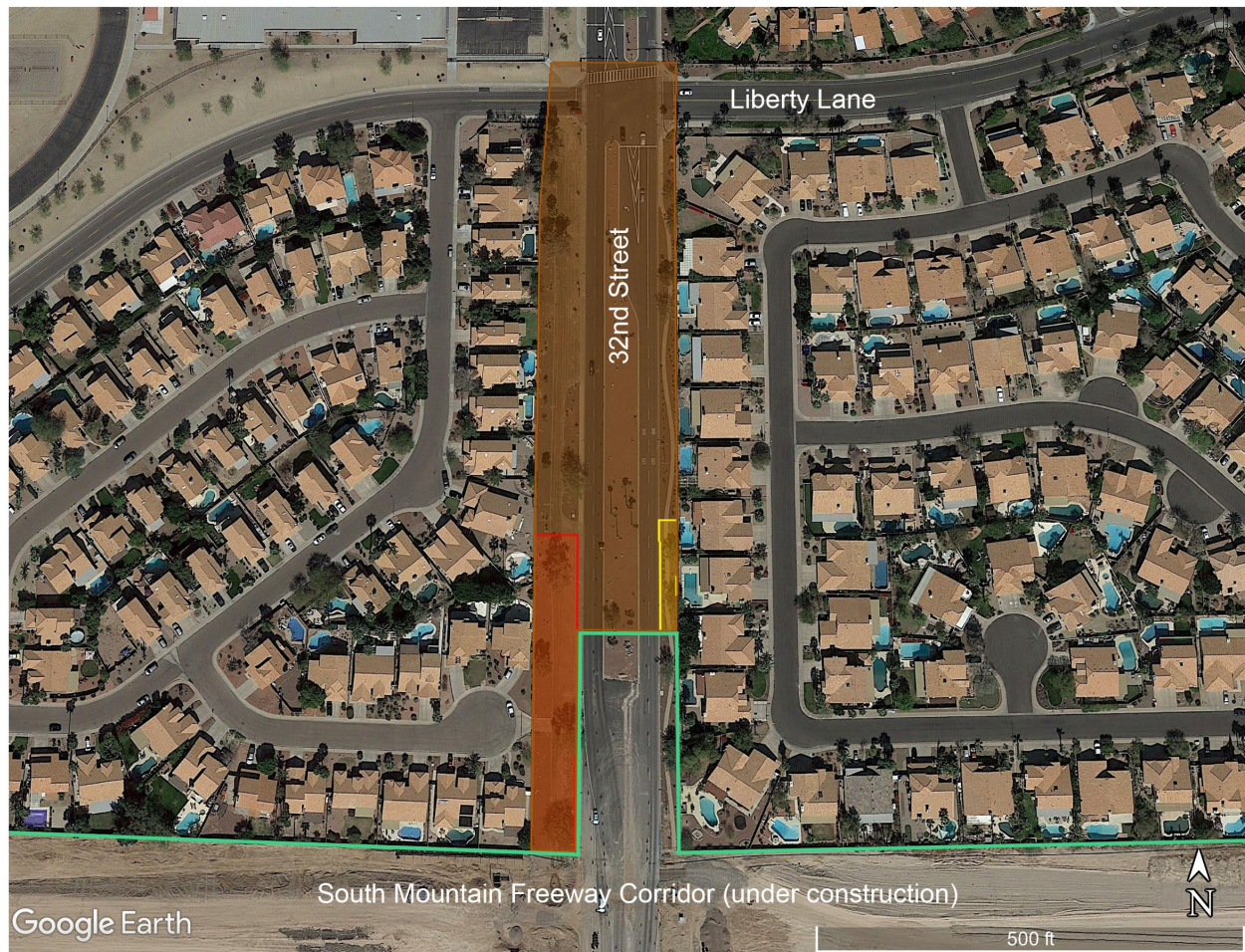
The SMF project is a part of the Regional Freeway and Highway System in the southwestern portion of the Phoenix metropolitan area in Maricopa County, Arizona. The approximately 22-mile-long freeway will be constructed as an eight-lane divided, access-controlled facility, with four travel lanes in each direction. The 32nd Street intersection with the SMF is located near the eastern terminus of the SMF's connection to I-10 (Maricopa Freeway) (see Figure 1-1).



Figure 1-1. Location Overview



**Figure 1-2.** 32nd Street Traffic Interchange Additional Impact Area



- Drainage easement
- Temporary construction easement
- Environmental study area
- FEIS and previous re-evaluation limits

## 1.2 Approved Environmental Documentation

To date, several environmental studies have been conducted for the SMF project. The completed environmental documents approved by ADOT and FHWA include:

- DEIS signed on April 16, 2013, and released to the public on April 26, 2013.
- FEIS signed on September 18, 2014, and released to the public on September 26, 2014.
- Errata to the FEIS signed on November 19, 2014 and released to the public on November 28, 2014 (the Errata was published to address public comments on the DEIS that were inadvertently omitted from the FEIS).
- ROD signed on March 5, 2015, and released to the public on March 13, 2015.
- SMF FEIS/ROD Reevaluation #1 signed February 19, 2016 addressed the addition of a local street connector and a pedestrian bridge.
- SMF FEIS/ROD Reevaluation #2 signed June 20, 2016 addressed the addition of remainder parcels to the Project right-of-way (ROW).
- SMF FEIS/ROD Reevaluation #3 signed August 10, 2016 addresses the addition of Chandler Boulevard: 27th Avenue to 19th Avenue.
- SMF FEIS/ROD Reevaluation #4 signed April 4, 2017, is for changing partial- parcel acquisitions to entire-parcel acquisitions between Vineyard Road and Lower Buckeye Road.
- SMF FEIS/ROD Reevaluation #5 signed June 5, 2017 addressed the need for the acquisition of 50 easements and new ROW locations for various minor construction modifications.
- SMF FEIS/ROD Reevaluation #6 signed June 19, 2017 addressed additional areas required for construction of the Salt River bridges.
- SMF FEIS/ROD Reevaluation #7 signed June 22, 2018 addressed the need for the acquisition of 73 new easement and/or ROW locations for various minor construction considerations.
- SMF FEIS/ROD Reevaluation #8 signed October 12, 2018 addressed the need for the acquisition of 19 easements and/or ROW locations for various minor construction considerations.

## 1.3 Previously Identified Impacts

The FEIS and ROD present a detailed description of anticipated impacts related to the SMF Selected Alternative. Key elements are listed below. This reevaluation will cover impacts beyond those previously disclosed.

- The project will convert approximately 2,488 acres of land to a transportation use.
- The project is consistent with local and regional plans; however, it will introduce visual and noise intrusion adjacent to residential neighborhoods.
- Implementation of the project in the Western Section will result in adverse impacts on populations protected under Title VI and the environmental justice Executive Order; impacts will not, however, be disproportionately high or cause undue hardship when compared with such impacts on the general population.
- The project will result in the displacement of approximately 169 single-family homes, two apartment complexes with 680 total units, and 42 businesses.



- The City of Phoenix will experience an inconsequential reduction of annual property and sales tax revenue due to the conversion of land to a transportation use. Travel time savings for motorists in the region after completion of the project will be over \$200 million per year (in 2013 dollars).
- The project will not result in any exceedances of the health-based National Ambient Air Quality Standards (NAAQS).
- The project will require the placement of noise barriers in selected locations to reduce noise to levels that meet ADOT policy and FHWA regulations.
- The project will affect up to 122 water wells and 94 acres of floodplains.
- The project will impact Waters of the United States and require appropriate permitting approvals from the U.S. Army Corps of Engineers (USACE).
- The project will not affect any currently listed threatened and endangered species. However, the project will result in the conversion of cover, nesting areas, and food resources for wildlife provided by the natural plant communities found in the project area. The project will create a physical barrier that could, depending on design, decrease movement of wildlife to and from the South Mountains and Sierra Estrella. In response, multifunctional crossing locations have been identified to provide habitat connectivity under the freeway.
- The project will affect a number of National Register of Historic Places (NRHP)-eligible prehistoric and historic sites and the South Mountains Traditional Cultural Property.
- The project will convert 723 acres of prime and unique farmlands to a transportation use.
- The project will indirectly convert 177 acres of prime and unique farmlands to uses other than agriculture.
- The project will interact with five high-priority hazardous materials sites.
- Impacts on views from residential and rural uses include construction impacts, new TIs, and visibility of the new facility. Impacts will not change the low-to-moderate visual quality of views along the freeway.
- The project will provide benefits related to regional energy consumption.
- The project will result in the direct use of resources in the South Mountains afforded protection by Section 4(f) of the Department of Transportation Act of 1966. There is no feasible and prudent alternative that avoids use of the South Mountains.

## 1.4 Public and Agency Involvement

ADOT and FHWA undertook an extensive public and agency involvement program during the National Environmental Policy Act (NEPA) phase of the project. Key elements included:

- Publication of the Notice of Intent on April 20, 2001, in the Federal Register (66[77]:20345).
- Invitations sent in 2001 to USACE, U.S. Environmental Protection Agency (USEPA), U.S. Bureau of Indian Affairs (BIA), and U.S. Fish and Wildlife Service (USFWS) to be cooperating agencies were issued. USACE and BIA agreed to be federal cooperating agencies. USEPA and USFWS declined. In 2009, the Western Area Power Administration (WAPA) was invited, and agreed, to be a cooperating agency.
- Agency scoping letters were sent to 232 federal, State, and local agencies in October 2001. A 2-day agency scoping meeting was held later that month in Phoenix. Agencies were invited to participate in the project through monthly progress meetings during the project duration.

- Public scoping was initiated in November 2001 and included presentations at 23 neighborhood meetings and two public meetings.
- Between the public scoping kick-off through the release of the DEIS, over 200 presentations were made to neighborhood groups, homeowners' associations, chambers of commerce, village planning committees, trade associations, and other interested parties. Twelve public meetings were held.
- ADOT created a CAT made up of groups and organizations in the Study Area. The CAT worked as a voluntary, advisory team to provide advice and input to ADOT and FHWA. Approximately 60 CAT meetings were held, each open to the public.
- The DEIS was released to the public on April 26, 2013, beginning the 90-day comment period (the minimum requirement under NEPA is 45 days). A public hearing was held May 21, 2013, at the Phoenix Convention Center from 10 a.m. to 8 p.m. Six community forums were held in Study Area communities to supplement the public hearing. Additionally, an online public hearing was created for those who could not attend a meeting in person.
- Approximately 900 people attended one of the public events, almost 1,900 unique visitors viewed information from the online hearing, and the project team received over 8,000 comments.
- The FEIS was released to the public on September 26, 2014. A 60-day review period was provided. As a result of the publication of the errata, ADOT and FHWA extended the review period to December 29, 2014. During the review period for the FEIS and errata, approximately 250 comments were received.
- ADOT and FHWA worked in close coordination with the Gila River Indian Community (GRIC) to hold a community forum on November 15, 2014, at the Boys & Girls Club, Gila River – Kumatke. The GRIC developed the agenda and facilitated the forum, which consisted of introductions, a description of the comment opportunities and court reporters' roles, an introduction to the SMF video flyover simulation, and an "open-microphone" comment period. Other than invited guests, the meeting was open to only GRIC members. FHWA and ADOT project team members were guests at the forum and were in attendance to listen to comments. A translator was provided for those wishing to speak in the native O'odham language.

Since the ROD was approved on March 5, 2015, ADOT, FHWA, the C202P, or other stakeholders have continued an extensive public and agency involvement program, with the following key details:

- An open house meeting on June 15, 2016, at Pecos Community Center, 17010 S. 48th Street, Phoenix, was sponsored by State Representative Jill Norgaard in collaboration with State Representative Bob Robson, State Senator Jeff Dial, and City of Phoenix Councilman Sal DiCiccio. The purpose of the meeting was to provide a briefing on noise-abatement plans, traffic management and scheduling, bike paths, and aesthetics.
- A public open house meeting was held on August 24, 2016, at the Kings Ridge Preparatory Academy Cafeteria, 3650 S 64th Lane, Phoenix, to discuss the location and aesthetic treatment of the planned pedestrian bridge located between Broadway and Lower Buckeye Roads. Thirteen people attended the presentation and participated in a question and answer session.
- Three public meetings were held in 2016 to provide details and seek input on preliminary design plans, including information on the freeway's location, profile, interchange configurations and noise barrier locations, as well as initial concepts for landscaping and visual appearance:
  - September 27, 2016, at the Desert Vista High School, Multipurpose Room, 16440 South 32nd Street, Phoenix

- September 28, 2016, at the Betty Fairfax High School, Multipurpose Room, 8225 South 59th Avenue, Laveen
- October 6, 2016, at the Fowler Elementary School, Multipurpose Room, 6707 West Van Buren Street, Phoenix

Approximately 800 people participated in these meetings and the more than 660 comments, questions, e-mails and phone calls were collected by the Project team.

- A meeting for leaders from cities, regional agencies, schools, Title VI organizations, large employers, associations, and community public information officers was held December 20, 2016, at 411 North Roosevelt Avenue, Chandler, to provide a 6-month construction look ahead for the period between January 2017 and July 2017.
- Since September 2016 construction outreach has included the following:
  - 6113 stakeholders have been engaged through attending a public meeting or contacting the Project team.
  - 99 events were held, including presentation, briefings, community meetings and festivals.
  - 973 inquiries from members of the public have been received.
  - 548 public parties were contacted by the Project team to complete questionnaires and surveys.
  - 60 construction alerts have been issued for specific activities.
  - 4 notices have been issued in both English and Spanish to provide a 6-month look ahead for construction.
  - ADOT has issued media releases on average once per week since September 2016 to keep the public apprised of project updates.
  - Creation of a video on the project's use of rebar manufactured from scrap metal, saving 24,000 tons of mined ore, 13,000 tons of coal, and 1,000 tons of limestone.
  - A meeting was held for the Rio Del Rey neighborhood and schools to provide updates on the Elwood Street pedestrian bridge: approximately 200 people attended.
  - An event was held by C202P on October 26, 2017 for the Laveen Area Homeowners Association, surrounding community, businesses and school representatives to discuss closures at Southern.
  - Information on the proposal to include a TI at 32nd Street and Ivanhoe Street was presented to the public and local stakeholders through newspaper advertisement, e-mail alerts, news release, and social media that was published or distributed May 2, 2018. Additionally, a study-specific webpage was published on the SMF project website on May, 2, 2018.
- The USACE Los Angeles District held a public hearing on May 9, 2017 at the Boys and Girls Club of the East Valley, Gila River Branch-Komatke regarding the Corps consideration of the SMF Project's permit application under Section 404 of the Clean Water Act. Members from the GRIC were in attendance as were local business and community members. Public comment was recorded in the form of transcribed verbal statement, written statement, e-mail and phone transcription.
- ADOT held an open house on May 22, 2018 at Desert Vista High School to discuss the 32nd Street TI. The open house was also used as a forum to update community members on SMF construction activities as well as allow for public input.
- ADOT held an open house on May 30, 2018 at the Laveen Elementary School District Office to discuss the Ivanhoe Street TI. The open house was also used as a forum to update community members on SMF construction activities as well as allow for public input.

- Agency and stakeholder NEPA scoping letters were sent in July 2018 to 11 federal, State, tribal, and local agencies to introduce and request comments on the proposed 32nd Street and Ivanhoe Street TIs.

## 2 Description of Project Change

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The FEIS references enhancement opportunities during final design to incorporate elements of importance to the local community during the final design stage of the project. Page 3-60 of the FEIS proposed these enhancement opportunities as follows:

### **Enhancement Opportunities**

Construction and operation of any of the action alternatives would create opportunities for ADOT and local jurisdictions to identify additional enhancements. Examples of enhancements are both procedural and project-specific. A procedural enhancement could include the engagement of select members of the public to participate in the design phase or through public art projects in the corridor. A project-specific example might be the result of excess right-of-way (ROW) that may be suitable for other public infrastructure projects such as park-and-ride lots or bicycle/multiuse paths. During the design phase, ADOT, local municipalities, the Gila River Indian Community (Community), Valley Metro, and Maricopa Association of Governments (MAG) would work together to identify and create enhancement opportunities. MAG policy would determine how enhancements would be funded.

Based on coordination with the City of Phoenix, elected officials, and the public after the ROD, ADOT has proposed additional scope items for the project including a new TI at 32nd Street.

### 2.1 32nd Street Traffic Interchange

#### 2.1.1 Background

In the initial stages for developing alternative alignments, interchanges were located at all major arterials generally spaced at 1-mile or greater intervals along the arterial street grid. This included an interchange at 32nd Street. During the third tier of the alternatives development and screening process for the EIS (2001-2005), the project team evaluated where TIs along the local arterial streets should be located (see page 3-12 of the FEIS). During the screening process, ADOT worked with the local agencies and the CAT to evaluate each of the interchange locations. During the evaluation for 32nd Street the City of Phoenix and CAT recommended that ADOT remove the interchange from further consideration due to the undesirable residential displacements (over 100 homes) and the proximity of the ramp intersections to a nearby high school. In 2006, the City of Phoenix conducted a traffic circulation study to evaluate the impacts of the proposed freeway without a 32nd Street TI on the local street system. The City of Phoenix study found there would be no adverse effects on the local street system if the freeway did not include a TI at 32nd Street.

Based on this, an interchange at 32nd Street was not included in the subsequent DEIS and FEIS. During the public comment period for each document, ADOT and FHWA received a number of comments questioning the decision to eliminate the interchange from consideration. The response from ADOT and FHWA referred back to the justification considered at the time in coordination with the City of Phoenix and with the support from the CAT.

After the ROD and prior to the initiation of construction of the project, ADOT and its contractor participated in a Public Input Meeting for the SMF in the Ahwatukee Foothills Village. At this 2016 meeting, the community, including City of Phoenix council members and State representatives, expressed an interest in re-considering the need for an interchange at 32nd Street. The concerns raised by the community included the concern that without a TI at 32nd Street, traffic would increase substantially on Liberty Lane and Lakewood Parkway (both minor collectors) because vehicles currently



using 32nd Street would need to get to 24th or 40th streets to access the new freeway. This additional traffic would pass directly by a number of local schools. A 2017 City of Phoenix traffic analysis (*Offsite Traffic Analysis Study: Loop 202 and S. Chandler Blvd.*), indicated “there would not be a significant increase in traffic on Liberty Lane (cut-through) because of the elimination of access to the east-west movements from 32nd Street onto the SMF.” Although Lakewood Parkway was not named specifically within the City of Phoenix traffic analysis, Liberty Lane becomes Lakewood Parkway on the east side of 32nd Street and the analysis results extend to Lakewood Parkway as well.

In 2017 and 2018, the project team received numerous requests from the local community and schools to revisit constructing a TI at 32nd Street and this was supported by elected officials and MAG. Because of these requests, ADOT and FHWA decided to conduct the reevaluation for the addition of an interchange at 32nd Street.

### 2.1.2 Overview

The purpose of the 32nd Street TI is to improve access to and mobility within the Ahwatukee Foothills Village. Benefits of this TI will include:

- maintaining current trip distributions by providing access to the freeway from all of the north south arterials that currently connect to Pecos Road
- reducing traffic volumes on the adjacent interchanges at 40th and 24th streets
- providing a nearby access point in the event of emergency for the many local schools in the 32nd Street area

### 2.1.3 Description

The design presented in the FEIS/ROD included a grade-separated bridge for the freeway over 32nd Street (see Figure 3-25 on page 3-47 of the FEIS). This bridge has remained in the plans through the development of the final design. As such, the addition of the TI at 32nd Street primarily requires the addition of on- and off-ramps from the freeway to 32nd Street and the addition of auxiliary lanes between the adjacent ramps at 40th Street and 24th Street. To avoid acquiring new ROW and residential displacements, which was the reason for removing the TI at 32nd Street during the third tier of the alternatives development and screening process for the EIS (to avoid over 100 residential displacements), the proposed designs reduced the spacing between the ramp intersections by using retaining walls, thus the TI ramps are able to remain within the current SMF corridor in a tight diamond configuration (see Figure 2-1). Other ancillary items associated with a TI such as lighting, striping, signals, and minor crossroad improvements will also be addressed in the designs. No new ROW would be required; however, easements would be needed.

New easements needed for the interchange include:

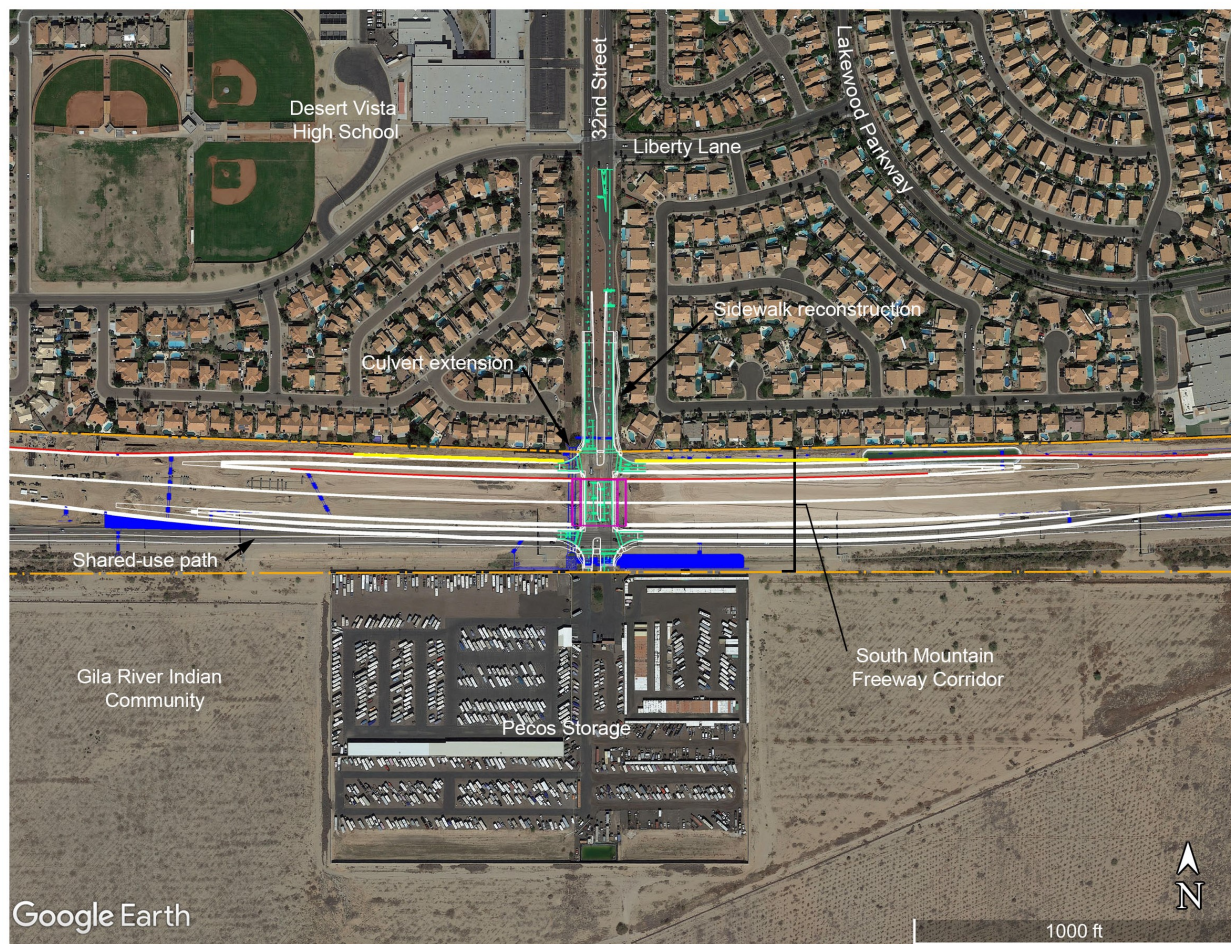
- Approximately 20,000 square feet of drainage easement on the northwest corner of the TI for the extension of the box culvert on the west side; the culvert is along an existing urban stormwater drainage and is not a Water of the United States
- Approximately 3,000 square feet of TCE from the Lakewood HOA common area on the northeast corner of the TI for reconstruction of sidewalk

The preliminary designs for the 32nd Street TI are provided in Figure 2-1. Assessment of the environmental and social impacts for the new TI are presented in the following section. Minor changes in the design may further be developed based on final design but are not expected to change the assessment in this reevaluation. Any larger changes that could impact or affect the results of this reevaluation would be coordinated through FHWA. Preliminary cost for the TI is \$10 million.

The 32nd Street TI will include the following changes to the SMF project scope of work:

- Adding on- and off-ramps on both sides of the SMF at 32nd Street
- Extending a box culvert approximately 35 feet on the west side of 32nd Street, north of the SMF
- Reducing the shared-use path width on the south side of the SMF from 20 feet to 10 feet in the area solely affected by the 32nd Street TI
- Widening 32nd Street at the tie-in to the interchange to accommodate turning movements
- Reconfiguring sound walls to accommodate TI ramps
- Reconfiguring drainage basins to accommodate TI ramps
- Reconstructing an approximately 120-foot section of Lakewood HOA sidewalk

**Figure 2-1.** 32nd Street Traffic Interchange Preliminary Design



	Traffic interchange
	Bridge
	Roadway striping
	Noise barrier
	Drainage
	Visual Screen Wall

### 3 Environmental Consequences

This section presents an assessment of the environmental consequences that would occur or change as a result of adding a TI at 32nd Street to the SMF project. Table 3-1 provides a summary of identified environmental changes and resources addressed.

All of the mitigation and commitments made in the FEIS and ROD for the project apply to the new TI presented in this reevaluation. Resources with anticipated changes in environmental impacts resulting from the addition of the 32nd Street TI or requiring assessment for changes in the affected environment, are described in more detail following the table.

**Table 3-1.** Environmental Consequences Assessment for Addition of Traffic Interchange at 32nd Street

Setting/Resource Circumstance	Change in Affected Environment		Change in Environmental Impact		Additional Discussion Included
	Yes	No	Yes	No	
Land Use		X	X		Yes, see below
Social Conditions		X	X		Yes, see below
Environmental Justice and Title VI		X		X	No
Displacements and Relocations		X		X	No
Economics		X	X		Yes, see below
Air Quality		X		X	Yes, see below
Noise		X	X		Yes, see below
Water Resources		X	X		Yes, see below
Floodplains		X		X	No
Waters of the United States		X		X	No
Topography, Geology, Soils		X		X	No
Biological Resources		X		X	Yes, see below
Cultural Resources		X		X	Yes, see below
Prime and Unique Farmland		X		X	No
Hazardous Materials		X		X	Yes, see below
Visual Resources		X		X	No
Energy		X		X	No
Temporary Construction Impacts		X	X		Yes, see below
Material Sources and Waste Material		X		X	No
Secondary and Cumulative Impacts		X		X	No
Section 4(f)/Section 6(f)		X		X	Yes, see below



### 3.1 Land Use

Approximately 0.45 acre of additional land not originally identified in the FEIS/ROD and reevaluations will be converted to a drainage perpetual easement for the SMF project. This land will be used to construct a culvert extension to accommodate the TI ramp connections to 32nd Street.

**Table 3-2. New Easements**

Description	Acres	Purpose	Owner
Drainage easement	0.45	Culvert extension	Home Owners Association
TCE	0.06	Sidewalk realignment	Home Owners Association

Note: TCE = temporary construction easement

The new easements are adjacent to the proposed freeway ROW identified in the FEIS/ROD and/or previous FEIS reevaluations.

Land uses were identified through the use of aerial imagery on the Maricopa County Assessor's Office Parcel Viewer (Parcel Viewer 3.4, 2018). Current land uses of the new easements are developed common areas of a private HOA. The 0.45 acre drainage easement from the HOA common area being acquired for transportation use is currently used for drainage within an area zoned for residential purposes. The 0.06 acre TCE from the HOA common area is currently a landscaped sidewalk area along the roadside. The uses of these HOA lands will not change from their current use. The land being temporarily or permanently acquired for the 32nd Street TI as a result of the newly identified easements are existing streets and sidewalk already used for drainage and transportation purposes, therefore use of this land will not result in a change in impacts (see Figure 1-2).

The addition of easements are small increases to the SMF project; impacts to land uses have been adequately disclosed in the FEIS/ROD. No new mitigation measures are required for impacts on land use as a result of the proposed 32nd Street TI.

### 3.2 Social Conditions

A grade-separated bridge on the freeway over 32nd Street was addressed in the 2014 FEIS/ROD. Adding the TI at this location requires adding on- and off-ramps that connect the freeway to 32nd Street. This direct connection from the freeway to 32nd Street will increase traffic along 32nd Street as opposed to not constructing a TI at this location. Although traffic will be increased, the purpose of the TI is to improve overall circulation and accessibility for current and future residents in the neighborhoods. Employees of local businesses and schools in the general area would also benefit from the improved access and circulation.

The movement of traffic between a freeway and the local street network can lead to peak-hour congestion at TI locations and result in increased traffic volumes and delays; however, the traffic that would primarily benefit from and use the 32nd Street TI would be local residents that are currently using 32nd Street and the connecting streets. Since the intersection of Pecos Road and 32nd Street has been in use for over 20 years and traffic levels historically occurring at this intersection and along 32nd Street are likely to continue, constructing the 32nd Street TI is not likely to cause a perceived increase in traffic by locals.

Other ancillary features associated with the TI that will be introduced in the area around the TI would include lighting and traffic signals. Although these features, as well as traffic due to the TI ramps, would be closer to homes, the impacts from noise, lighting, and visual impacts resulting from adding the TI would not be noticeably increased because the SMF project already introduces these effects on a greater scale and these effects would be addressed by the current SMF measures and mitigation.

Increased negative effects on community character as a result of the 32nd Street TI would be minimal because the TI would remain mostly concealed within the SMF ROW and the current condition of retaining access along 32nd Street, as desired by the local community, would be maintained.

The movement of people, goods and services in the local area would be improved by adding the 32nd Street TI as it would retain its historical condition of access along 32nd Street. Positive effects on community cohesion would be expected by adding the TI to the SMF project.

Effects of traffic, lighting, noise, and visual aspects on the local community as a result of adding the 32nd Street TI, although increased, are minimal and these effects have been adequately disclosed in the FEIS/ROD. In the case of traffic increases along 32nd Street, this is a positive effect, compared to not including a TI at 32nd Street, since it maintains the historical access to 32nd Street and maintains community cohesion. As a result of discussions with residents that live immediately adjacent to the SMF and proposed TI ramps, visual screen walls would be constructed that extend from the end of the planned noise barriers along the on- and off-ramps, to 32nd Street. This would mitigate the direct visibility traffic may have onto residential properties. The following measure would be implemented to screen residential views from traffic along the 32nd Street TI on- and off-ramps:

- ADOT will provide visual screen walls between residential property and the proposed TI ramps from the end of the planned noise barrier to near 32nd Street.

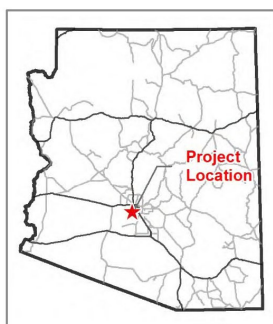
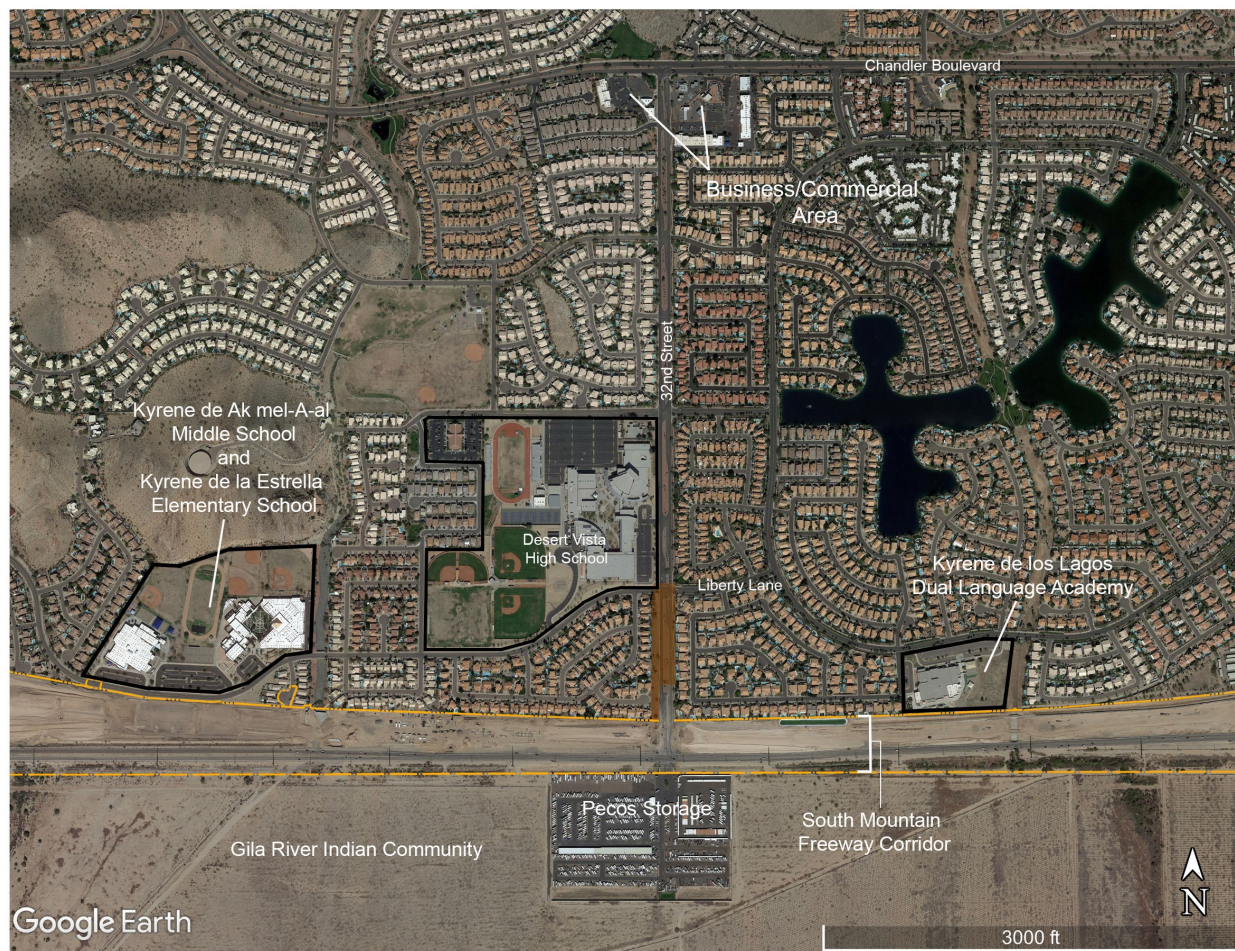
### **3.3 Economics**

The 2014 FEIS/ROD disclosed the potential positive and negative effects on businesses near the SMF. The addition of the 32nd Street TI would provide direct traffic access to the only business adjacent to the SMF at this location, a storage/U-Haul rental business, that otherwise would not have direct freeway access (see Figure 3-1). Although this type of business is less dependent on “drive-by” or “impulse” customers and tends to be sought out by customers—ease of access is still important. The addition of the 32nd Street TI may offset the reduced accessibility by potential customers under the current plans, which may lead to increased business volume for the storage/U-Haul rental business.

Retail businesses and service further north along 32nd Street at Chandler Boulevard, although not visible from the SMF, may also experience some level of increased business due to the TI (see Figure 3-1).

Economic impacts on businesses as a result of adding a TI at 32nd Street may be beneficial. There would be no new substantial economic impacts by adding a TI at 32nd Street; therefore, no new mitigation measures are required for economic resources as a result of the proposed 32nd Street TI.

**Figure 3-1.** Businesses and Section 4(f) Properties



Environmental study area

### 3.4 Air Quality

The FEIS discussed ozone, carbon monoxide (CO), particulate matter less than or equal to 10 microns in diameter (PM<sub>10</sub>), Mobile-Source Air Toxics (MSAT), and construction emissions for general conformity. An analysis of PM<sub>10</sub>, CO, and MSAT was included in the August 2014 Air Quality Technical Report for the SMF. The SMF was included in MAG's Fiscal Year (FY) 2014–2018 Transportation Improvement Program (TIP) and 2035 Regional Transportation Plan (RTP), which were found to conform to the ozone, CO, and PM<sub>10</sub> State Implementation Plans (SIPs) by the U.S. Department of Transportation on February 12, 2014.



Since the time of issuing the ROD, the following updates have occurred that may affect the potential air quality impacts:

- Modifying the project design and scope, triggering the need to re-determine project level conformity
- New MSAT guidance from FHWA released October 2016
- Applicable SIPs have updated Phoenix CO Maintenance Area's Second 10-year Maintenance plan approved January 2016

Based on changes since issuance of the ROD, Transportation Conformity (as it relates to ozone, CO and PM<sub>10</sub>), and construction emissions have been re-evaluated for the 32nd Street TI. Transportation Conformity, as required by the Clean Air Act ensures that highway and transit projects do not produce new air quality concerns. Transportation Conformity requirements apply to any transportation-related criteria pollutants for which the project area has been designated a nonattainment or maintenance area for NAAQS for transportation-related pollutants; this includes ozone, CO, and PM<sub>10</sub> for the SMF project. In addition to Transportation Conformity requirements, this re-evaluation addresses potential changes to the MSAT assessment, based on FHWA guidance updated since the FEIS MSAT analysis.

### **Conformity for Ozone**

By adding the proposed TI to the SMF at 32nd Street, there would be somewhat better access to and from addresses near 32nd Street, thus tending to shorten trips that would otherwise need to use the 24th and 40th Street interchanges that are already included in the approved SMF, or other routes. The proposed project to place a TI at 32nd Street would tend to lessen congestion vs. without the TI and would have minimal effects on regional vehicle miles travelled (VMT). Both of these improvements will likely tend to reduce regional air pollutant emissions, including those from ozone precursors (nitrogen oxides and volatile organic compounds), associated with highway vehicle traffic.

Transportation Conformity requirements in 40 CFR 93, Subpart A, with respect to regional emissions budgets, are assumed to be met if the proposed project is included in a conforming (approved) RTP and TIP. The project is included in an approved RTP and TIP with regional conformity analysis, as amended and approved by FHWA on July 17, 2018. The latest State Transportation Improvement Program (STIP) amendment #36 was approved by FHWA and the Federal Transit Administration on August 18, 2018.

### **Conformity for Carbon Monoxide and PM<sub>10</sub> Hot-Spots**

The FEIS included project-level hot-spot analyses for CO and PM<sub>10</sub>, which were conducted for intersections and interchanges of the Preferred Alternative with the highest projected traffic volumes or the worst levels of service or both; the 40th Street TI was selected as one of these.

The SMF was included in MAG's FY2014–2018 TIP and 2035 RTP, which were found to conform to the ozone, CO, and PM<sub>10</sub> SIPs by the U.S. Department of Transportation on February 12, 2014.

The transportation conformity rule describes the requirements for project-level conformity determinations, which are:

- The project is included in a conforming plan and TIP.
- The project's design concept and scope have not changed significantly since the conformity determination was made for the plan and TIP from which the project derived.
- The conformity determination includes a hot-spot analysis in:
  - CO nonattainment and maintenance areas
  - PM (PM<sub>10</sub> and PM<sub>2.5</sub>) nonattainment and maintenance areas (only for projects of air quality concern)
- The project complies with control measures in the PM SIP.

During interagency consultation, the SMF project required a PM<sub>10</sub> hot-spot analysis because the project was located in a PM<sub>10</sub> nonattainment area and was determined to be a project of air quality concern due to



it being a new highway project with a significant number of diesel vehicles. A hot-spot analysis for CO was required because Maricopa County is a CO maintenance area.

The conformity regulations require hot-spot analyses to address the year or years of peak emissions. Through the interagency consultation process, the design year of 2035 was selected as the analysis year when traffic volumes and VMT would be the greatest.

The addition of the 32nd Street TI to the SMF was evaluated to assess compliance with air quality goals and requirements. The design year for the current evaluation of the 32nd Street TI was 2040.

Based on the 2040 traffic information the traffic volumes, including diesel truck traffic, are similar to the 2035 traffic volumes; therefore, impacts on air quality for a 2040 evaluation will not change appreciably from 2035 impacts. Additionally, with the 40th Street TI having been addressed in the FEIS as representing one of the highest projected traffic volumes / worst levels of service for the corridor, the impacts resulting from the 32nd Street TI are conservatively represented with the hot-spot analyses included in the FEIS. The traffic study for the 32nd Street TI also shows that adding this point of access will reduce both daily traffic volumes and delay at the 40th Street TI, which would tend to reduce CO and PM<sub>10</sub> concentrations at that location as compared to the conditions modeled for the FEIS.

A Project of Air Quality Concern Questionnaire (POAQCCQ) was prepared (see Appendix B) to assess the proposed project in relation to project types in 40 CFR 93.123(b) requiring a quantitative analysis of local particulate emissions (hot spots) in nonattainment or maintenance areas: the SMF is located within the *Phoenix PM-10 Nonattainment Area for PM<sub>10</sub>*. Project types that have been specifically defined with potential to cause local air quality concerns include:

- Projects on new highways that have more than 125,000 annual average daily traffic (AADT) and 8 percent or more of the AADT is diesel truck traffic
- Expansion of a highway that affects a congested intersection that operates (or will operate, for a new intersection) at a Level-of-Service (LOS) of D, E, or F and that expansion has a significant increase in the number of diesel trucks
- Projects in areas or affecting sites that are identified in an applicable PM<sub>10</sub> implementation plan as sites of violation or possible violation

Traffic projections for 2040 for the road network within the study area were obtained from the MAG Regional Travel Demand Model. The traffic data indicates there will be no significant increase in the volume of diesel trucks on the SMF as a result of the 32nd Street TI project. The highest traffic volume projected on the freeway mainline in the area, just east of 40th Street, without the TI is 135,998 vehicles per day, including 23,339 diesel trucks, and with the TI is 139,910 vehicles per day, including 23,374 diesel trucks, a diesel truck increase of 0.1 percent. The new interchange would provide access to an almost exclusively residential area with very few commercial, industrial, or other land use activities that typically attract commercial truck traffic.

A traffic report was prepared by HDR dated July 16, 2018 that modeled the 32nd Street TI intersections for LOS as well as the nearby TIs at 40th and 24th Streets. The results indicate that all of the intersections would operate at a LOS of C or better, with or without the 32nd Street TI.

CO hotspots are required for projects affecting intersections that are at Level-of-Service D, E, or F, or those that will change to Level-of-Service D, E, or F because of increased traffic volumes related to the project. Based on the updated traffic report this project does not require a CO quantitative hotspot analysis for transportation conformity.

The PM<sub>10</sub> implementation plan revision issued by MAG (*2012 Five Percent Plan for the Maricopa County Nonattainment Area*) was approved by the USEPA on May 30, 2014. This implementation plan does not identify the 32nd Street area or interchanges in general, as sites of existing or potential violation.

Additionally, the PM<sub>10</sub> hot-spot analyses for the South Mountain Freeway FEIS involved traffic interchanges with much higher total and diesel vehicle traffic levels. The north and south intersections for the 32nd Street traffic interchange have volumes of total traffic and diesel vehicle traffic less than the 40th Street signalized intersection previously analyzed for PM<sub>10</sub> hot spots in the FEIS. Therefore, the prior analyses conducted for transportation conformity and NEPA purposes in the FEIS demonstrate that the proposed 32nd Street traffic interchange would not cause or contribute to violations of the PM<sub>10</sub> NAAQS. Although the 32nd Street TI ramps are approximately 50 to 60 feet closer to a residential neighborhood, the distance would not change conclusions for PM<sub>10</sub> hotspots. It is clear from the prior analyses that the proposed 32nd Street traffic interchange is not a site of violation or potential violation of the PM<sub>10</sub> NAAQS.

Based on the 2040 traffic data and analysis, the proposed 32nd Street TI is not a Project of Air Quality Concern and will not require a PM<sub>10</sub> hot-spot analysis. Interagency consultation was completed in accordance with 40 CFR 93.105 and the USEPA concurred on October 4, 2018 that the “project is not a project of air quality concern and does not require a particulate matter hot-spot analysis” (see Appendix B); there were no responses from the Arizona Department of Environmental Quality (ADEQ), MAG and the Maricopa County Air Quality Department.

The 32nd Street TI has been included in an approved RTP and TIP (July 17, 2018), considered for conformity, and is consistent with the air-quality goals for the area. The latest STIP amendment #36 was approved by FHWA and the Federal Transit Administration on August 18, 2018.

Due to the changes since the 2014 ROD as noted above, the project was reevaluated to ensure that it maintains conformity with the SIPs. The Proposed Modified Project study area is located in the Phoenix (Maricopa County) Serious PM<sub>10</sub> Nonattainment Area, Phoenix-Mesa (Maricopa County) Moderate Eight-Hour Ozone Marginal Nonattainment Area, and Phoenix (Maricopa County) Carbon Monoxide (CO) Maintenance Area. Therefore, the following SIPs apply to the study area:

- 2012 *Five Percent Plan for the Maricopa County Nonattainment Area*, Approved by USEPA on June 10, 2014; effective July 10, 2014
- 2013 *Carbon Monoxide Maintenance Plan for the Maricopa County Area*, Approved by USEPA on March 3, 2016; effective April 4, 2016
- 2014 *Maricopa Eight-Hour Ozone Marginal Nonattainment Maintenance Area Plan*, Approved by USEPA on October 16, 2015; effective December 15, 2015.

The proposed 32nd Street TI project is consistent with and would not impede compliance with these SIPs.

### **Mobile Source Air Toxics**

A quantitative analysis of MSAT emissions was performed as part of the 2015 FEIS for the SMF. That analysis concluded that traffic-related MSAT emissions in the project study area in 2035, for the preferred alternative for SMF implementation, would be less than 1 percent higher than for the no-action alternative. It also concluded that MSAT emissions for project implementation in 2035 would be considerably lower than baseline (2012) emissions.

The FHWA has updated their MSAT analysis policy/guidance since the 2015 FEIS. The current policy dated October 16, 2016, updated the prior policy from December 2012, by incorporating emissions estimates that take into account three additional USEPA rules to control motor vehicle emissions, using the latest version of the Motor Vehicle Emissions Simulator (MOVES 2014a) software. The latest updated policy shows that, consistent with the earlier policy and MOVES projections, MSAT emissions will drop dramatically in the coming decades, even with substantial increases in VMT.

Implementation of the proposed 32nd Street TI project would not affect the MSAT conclusions from the 2015 FEIS with respect to the SMF project, in light of the latest FHWA guidance. In addition, the proposed 32nd Street TI would have little effect on MSAT emissions, as the project would cause minimal

changes in regional VMT and congestion. Based on this finding, there is no need for additional quantitative MSAT emissions analysis for the proposed 32nd Street TI project.

### **Construction Emissions and General Conformity**

The August 2014 Air Quality Technical Report information and disclosures in the FEIS/ROD for construction emissions remain valid and would not change as a result of construction of the 32nd Street TI. As explained in the 2014 Air Quality Technical Report for the SMF, having a construction duration of less than 5 years, project construction-related emissions are exempt from PM<sub>10</sub> conformity analysis; therefore, no new mitigation measures are required for air quality concerns as a result of construction activities associated with the proposed 32nd Street TI.

The addition of the 32nd Street TI to the SMF would not include any stream crossings subject to USACE approval; therefore, General Conformity requirements of 40 CFR 93, Subpart B do not apply to this TI project.

### **Summary**

In summary, the conclusions from the FEIS Air Quality Technical Report are still valid with respect to the approved SMF project. Furthermore, the proposed new project to add the 32nd Street TI does not require additional hot-spot analyses for CO or PM<sub>10</sub>, does not require new MSAT emissions analysis, is consistent with the latest SIPs for the area, and last, meets all Transportation Conformity requirements (40 CFR 93, Subpart A). No new mitigation measures are required for impacts on air quality as a result of the proposed 32nd Street TI.

## **3.5 Noise**

Noise sensitive receptors of single family homes are located on both sides of 32nd Street north of the SMF. A noise report titled *SR 202L (South Mountain Freeway) I-10 (Maricopa Freeway) – I-10 (Papago Freeway) Final Noise Report (Pecos Segment) Submittal No. 2* was completed in May 2017 by C202P that recommended noise barrier along the SMF mainline edge for the homes. An addendum to the final noise report was completed by C202P in July 2018 that included additional noise monitoring and updated the noise model to address a TI at 32nd Street (see Appendix C). The noise model was revised by adding horizontal and vertical alignments for the ramps at the proposed 32nd Street TI with the original traffic volumes and vehicle mix percentage used for the SMF mainline. Traffic data were added for the 32nd Street TI ramps. Noise barriers were re-evaluated along the revised roadway edges based on the ADOT Noise Abatement Policy (NAP), dated July 13, 2011. The locations and heights of the noise barriers are analyzed and adjusted to reflect the 32nd Street TI configuration while ensuring the noise barriers provide adequate traffic noise abatement to sensitive receptors as does the current SMF design (see Figure 2-1).

Measures to address noise impacts as defined in the 2014 FEIS/ROD have been applied to the proposed TI and all noise criteria required by the ADOT NAP have been met. No new mitigation measures are required for noise impacts as a result of the proposed 32nd Street TI.

## **3.6 Water Resources**

The new drainage easement will be acquired to extend a culvert, currently planned for the SMF, which is located along a stormwater conveyance facility serving development and existing city streets. The culvert, as part of the SMF currently under construction, will comply with the post-construction water quality requirements and best-management practices as described in the ADOT Post-Construction Best Management Practices Program, per ROD commitment WRE-6, and the culvert extension would not negatively affect the stormwater conveyance.

Although water runoff along the facility has the potential to affect surface waters, the minimal extension of the culvert within the facility would not affect the function of the facility. No other modifications to the

facility would occur. Any effects on water resources are minimal and these effects have been adequately disclosed in the FEIS/ROD. No new mitigation measures are required for impacts on water resources as a result of the proposed 32nd Street TI.

### 3.7 Biological Resources

The 32nd Street TI area outside the SMF corridor is a developed residential neighborhood and city street. Natural habitat does not occur; however, desert landscaping and planted trees provide some habitat, primarily for birds and reptiles.

The USFWS Information, Planning, and Conservation (IPaC) system was accessed on August 28, 2018 (unofficial report) to evaluate any new effects outside of those considered in the Biological Evaluation (BE) completed in July 2014 and summarized in the FEIS. The results of the review revealed no new Endangered Species Act (ESA)-protected species or any proposed or designated critical habitat within or near the project area since the July 2014 BE (see Appendix D).

The Arizona Game and Fish Department Online Environmental Review Tool was accessed on September 7, 2018 (HGIS-07993) to identify any new special status species documented within 3 miles of the project area since the July 2014 BE. No new special status species concerns were identified (see Appendix D).

Impacts on biological resources as a result of the proposed 32nd Street TI would not change from what was disclosed in the SMF FEIS/ROD and BE. In accordance to the SMF Project technical provisions and mitigation measures outlined in the ROD, work associated with the SMF, to include the 32nd Street TI, would be subject to provisions and measures that address protection of biological resources. No new mitigation measures are required to avoid impacts on biological resources as a result of the proposed 32nd Street TI.

### 3.8 Cultural Resources

The Ahwatukee 32nd Street area was surveyed in 1984 by Archaeological Resource Services (Stone 1984) and reported in *An Archaeological Survey of a 768 Acre Parcel near Williams Field road and 40<sup>th</sup> Street, Maricopa County, Arizona* prior to residential development and was also addressed in a survey report titled *A Class III Cultural Resource Survey of Five Alternative Alignments in the South Mountain Freeway Corridor Study Area, Maricopa County, Arizona* that was prepared for the SMF project by the GRIC (Darling 2005). The GRIC survey included an approximately 1,000-foot corridor north from the GRIC boundary. The proposed 32nd Street ground disturbing work is located within the areas addressed in the previous cultural survey reports. The residential neighborhoods and 32nd Street were not surveyed for this EIS reevaluation because the ground was previously disturbed and covered by development and landscaping.

Continuing Section 106 consultation for the SMF proposed 32nd Street TI scope of work change was initiated on July 12, 2018 in accordance with the programmatic agreement developed between FHWA, Arizona State Historic Preservation Office (SHPO), and ADOT (executed July 21, 2015) with the finding that an “adverse effect” determination was still appropriate for the overall SMF project. Consultation letters were mailed to 35 consulting parties (see Appendix E).

Responses were received from the Arizona State Land Department, Arizona State Museum, BIA, Bureau of Land Management, City of Phoenix-Pueblo Grande Museum, GRIC, Hopi Tribe, Bureau of Reclamation (Reclamation), and SHPO (see Appendix E). All responses were signature concurrences with the exception of the GRIC and Reclamation responses. The GRIC-Tribal Historic Preservation Office (THPO) provided a letter maintaining concurrence with a finding of adverse effect for this undertaking and that GRIC-THPO concurrence is not to be interpreted as support for the SMF project. GRIC-THPO also reiterates that the GRIC identifies South Mountain as a Traditional Cultural Property and that the project

is within the ancestral lands of the Four Southern Tribes. Reclamation responded that they reviewed the proposed project and they do not have any land in the Area of Potential Effect (APE) and they do not comment on projects for lands not under their jurisdiction.

There are no known historic or prehistoric cultural resources present in the 32nd Street TI location. No new mitigation measures are required for cultural resources as a result of the proposed 32nd Street TI. If previously unidentified cultural resources are encountered during any activity related to the SMF, the contractor shall stop work immediately and notify the ADOT Engineer per ROD commitment CUL-8.

### **3.9 Hazardous Materials**

A Draft Initial Site Assessment (ISA) for hazardous materials was completed in November 2012 and was updated in an addendum in June 2014 as part of the FEIS/ROD for the SMF project. Since the June 2014 addendum, several Phase I and Phase II Environmental Site Assessments have been completed on a site by site basis. Initially, ROW acquisition for the SMF project identified larger sized parcels in which full comprehensive Phase I analysis was an appropriate level of environmental review for all ROW acquisition. As design progressed, subsequent ROW needs became much smaller and new ROW or easements were often adjacent to larger parcels in which Phase I Environmental Site Assessments had been previously conducted and approved. In circumstances where new ROW or easements are to be acquired and are minimal in size and in association with parcels in which a Phase I has already been completed, and no environmental concerns were revealed, a site reconnaissance and review of updated environmental databases at the ADEQ, is completed.

The proposed TI is mostly within the current SMF corridor, with the exception of adjacent, minor work related to tying the entrance and exit ramps into 32nd Street, culvert extension, lighting, striping and signals. The adjacent proposed work area for the 32nd Street TI was reviewed for hazardous material concerns via a field visit and regulatory database search and documented in a memo dated September 20, 2018 (see Appendix F). No hazardous materials concerns were found. No further hazardous materials investigations or new mitigation measures are required for hazardous material concerns as a result of the proposed 32nd Street TI. If suspected hazardous materials are encountered during construction, work would stop at that location and ADOT would arrange for proper assessment, treatment, or disposal of those materials per ROD commitment HZM-7.

### **3.10 Temporary Construction Impacts**

New traffic control may extend to the Liberty lane intersection, an additional 0.15 mile from current construction, to address modifications for the 32nd Street tie-in to SMF ramps as well as new 32nd Street pavement striping, street lighting, and sidewalk work. The 32nd Street TI is located adjacent to the ROW limits described in the FEIS/ROD and are therefore in areas where temporary construction impacts have been disclosed. The FEIS/ROD disclosed impacts involving temporary construction noise and disruption to the traffic patterns and which are currently occurring along 32nd Street as a result of SMF construction. Temporary construction impacts resulting from the addition of the 32nd Street TI will not be substantially increased. No new mitigation measures are required for temporary construction impacts as a result of adding the 32nd Street TI to the SMF project.

### **3.11 Section 4(f) Resources**

An analysis of properties eligible for protection under Section 4(f) of the U.S. Department of Transportation Act of 1966 (Title 49, United States Code, Section 303) was completed as part of this environmental reevaluation. Section 4(f) properties are any publicly owned parks and recreation areas (including trails), waterfowl and wildlife refuges, and historic sites considered to have national, state, or local significance.

Three properties are within the immediate project vicinity that were previously identified as eligible for Section 4(f) protection and no new potential Section 4(f) properties were found. Although Desert Vista High School, located along 32nd Street, and their recreation facilities are located near the project, the facilities are not open to the public (see Figure 3-1). The previously identified Section 4(f) properties include:

- South Mountains Traditional Cultural Property
- Kyrene de los Lagos Dual Language Academy
- Kyrene de AkimelA-al Middle School and Kyrene de la Estrella Elementary School

The South Mountains Traditional Cultural Property includes the isolated South Mountains range and its cultural features that hold cultural significance for the GRIC. The proposed 32nd Street TI project would remain within the current SMF corridor and adjacent developed surface areas of a residential neighborhood where cultural resources are not present. Because the proposed 32nd Street TI is within the SMF corridor and immediately adjacent to a developed neighborhood, the TI project would not have potential to impact the South Mountains Traditional Cultural Property and the assessment does not change from what was disclosed in the FEIS.

The Kyrene de los Lagos Dual Language Academy property, previously named Kyrene de los Lagos Elementary School in the FEIS, is located along the north side of the SMF and is immediately adjacent to the eastern limits of the TI. This property is afforded protection under Section 4(f) due to its associated outdoor recreational facilities (see Figure 3-1).

The construction of the 32nd Street TI would not incorporate any land, permanently or temporarily, from Kyrene de los Lagos Dual Language Academy or create proximity impacts. The school does not have noise-sensitive activities or viewshed characteristics that contribute to its importance as a Section 4(f) resource. Therefore, the impacts as disclosed in the FEIS/ROD would not change as a result of construction of the 32nd Street TI and no measures to minimize harm are warranted.

The Kyrene de Akimel A-al Middle School and Kyrene de la Estrella Elementary School are located along the north side of the SMF near the western limits of the TI. The Kyrene Akimel A-al Middle School and Kyrene de la Estrella Elementary School share outdoor recreational facilities (see Figure 3-1).

The construction of the 32nd Street TI would not incorporate any land, permanently or temporarily, from Kyrene de Akimel A-al Middle School and Kyrene de la Estrella Elementary School or create proximity impacts. The school does not have noise-sensitive activities or viewshed characteristics that contribute to its importance as a Section 4(f) resource. Therefore, the impacts as disclosed in the FEIS/ROD would not change as a result of construction of the 32nd Street TI and no measures to minimize harm are required.

## **4 New Commitments Related to the 32nd Street TI**

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The commitments listed below will be implemented and tracked along with the commitments and mitigation measures presented in the ROD.

- The contractor shall disclose future changes in rights-of-way and easement requirements for the project to ADOT as they are identified.
- ADOT will provide visual screen walls between residential property and the proposed traffic interchange ramps from the end of the planned noise barrier to near 32nd Street.

## 5 Public/Agency Outreach

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Since the approval of the FEIS and ROD on March 5, 2015, FHWA and ADOT have consulted with affected stakeholders on various aspects of the SMF design. Because the introduction of the proposed TI is a change in the design, ADOT completed a reevaluation to assess the environmental impacts that would result from adding the TI at 32nd Street.

Public coordination and outreach to inform the public and stakeholders about the addition of the 32nd Street TI included the following:

- ADOT held an open house on May 22, 2018 from 6:00 p.m. to 8:00 p.m. at Desert Vista High School, 16440 South 32nd Street in Phoenix. The open house allowed attendees to view renderings, provide feedback on the 32nd Street TI, and also get Pecos Segment construction updates. Attendees could speak one-on-one with project staff about the 32nd Street TI environmental study and the Pecos Segment construction updates. Attendees were encouraged to complete a questionnaire and comment form regarding the proposed TI. Approximately 135 people attended the open house. A total of 1,748 comments were received during the comment period through US mail, project telephone line, email, Open House comment form, and through the online questionnaire (available in both hardcopy and online versions). Common themes from comments expressed by the public included:
  - Freeway access road
  - Business access
  - Impacts on neighborhood collector roads
  - Cost
  - Emergency access
  - Freeway access
  - General opposition
  - General support
  - Miscellaneous
  - Noise
  - Residential access
  - Right of way impacts
  - Safety
  - School access
  - Shared use path
  - Traffic control changes
  - Traffic volumes

A summary of the open house and public involvement activities are provided in a separate document prepared by HDR, Inc. September 2018 (Loop 202 South Mountain Freeway – 32nd Street Traffic Interchange Public Involvement Summary) and will be posted on the project website included in the bullet below.

- Agency and stakeholder NEPA scoping letters were sent to 11 federal, State, tribal, and local agencies in July 2018 to introduce the proposed 32nd Street TI and request comments. The public participation for the proposed TIs included the open house on May 22 as mentioned above as well as the information presented to the public and local stakeholders through a study-specific webpage on the SMF project website at [https://www.azdot.gov/projects/central-district-projects/loop-202-\(south-](https://www.azdot.gov/projects/central-district-projects/loop-202-(south-)



[mountain-freeway\)/outreach/32nd-street-interchange-study](#). This information was posted on May 2, 2018 and was updated as information became available.

Agencies and stakeholders that were provided with scoping letters requesting comments or concerns included the following:

- Mr. Bryan Bowker, Regional Director, Western Regional Office - Bureau of Indian Affairs, Phoenix, Arizona
- Ms. Cecilla Martinez, Superintendent, Pima Agency – Bureau of Indian Affairs, Sacaton, Arizona
- Ms. Kathleen Johnson, Director, Environmental Protection Agency Region 9 – Enforcement Division, San Francisco, California
- Ms. Sallie Diebolt, Chief, Arizona Branch of U.S. Army Corps of Engineers, Phoenix, Arizona
- Field Supervisor, U.S. Fish & Wildlife Service – Arizona Ecological Services Office, Phoenix, Arizona
- Mr. Clay Crowder, Habitat Branch Chief, Arizona Game and Fish Department, Phoenix, Arizona
- Mr. Misael Cabrera, Director, Arizona Department of Environmental Quality, Phoenix, Arizona
- Mr. Stephen Roe Lewis, Governor, Gila River Indian Community, Sacaton, Arizona
- Mr. Ed Zuercher, City Manager, City of Phoenix, Phoenix, Arizona
- Ms. Joy Rich, County Manager, Maricopa County, Phoenix, Arizona
- Mr. Mike Hummel, General Manager, SRP, Tempe, Arizona

The following is a summary of the responses to the scoping letters (see Appendix G).

- The director of the Maricopa County Transportation Department (MCDOT) replied by letter dated July 30, 2018, that MCDOT supports the development of the South Mountain Freeway/202L as a regionally significant corridor and that MCDOT has no facilities or jurisdictional land within the influence area of the proposed interchange and has no opposition or concerns regarding the proposed project.
- Staff with the Bureau of Indian Affairs, Western Region, Transportation office replied by e-mail on August 6, 2018, that they have no comments pertaining to the proposed TI at 32nd Street.

No additional responses were received.

Changes to the project related to the acquisition of new ROW and easements does not require an additional public hearing because the resulting change to impacts from those disclosed in the FEIS/ROD are not substantial, as discussed in the Environmental Consequences section of this reevaluation.

## **6 Conclusion and Recommendation**

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### **6.1 Conclusion**

A Supplemental FEIS is not warranted for the following reasons:

- The proposed modifications are limited in scope and impacts are all within or adjacent to the ROW footprint analyzed in the FEIS/ROD and reevaluations.
- As a result of the modifications to the project described herein, no substantial changes to the Selected Alternative and its related impacts identified in the FEIS and ROD will occur.

### **6.2 Recommendations**

FHWA, in coordination with ADOT, reevaluated the SMF, Interstate 10 (I- 10, Papago Freeway) to I-10 (Maricopa Freeway) FEIS and ROD per 23 CFR § 771.129. FHWA, with concurrence from ADOT, has determined that no substantial changes have occurred in the social, economic, or environmental impacts of the proposed action that would substantially impact the quality of the human, socioeconomic, or natural environment. Therefore, the original environmental document remains valid for the proposed action.

## **Appendix A. Off-site State Route Traffic Analysis: SR 202 and S. Chandler Blvd.**

## **Appendix B. Air Quality Assessment Memo for 32nd Street Traffic Interchange, Project of Air Quality Concern Questionnaire and Consulting Party Correspondence**

## **Appendix C. Addendum 4 to Final Noise Report (Pecos Segment)**

## **Appendix D. USFWS and Arizona Game and Fish Department Biology Database Results**

## **Appendix E. Section 106 Consultation**

## **Appendix F. Hazardous Materials Evaluation Memo**



## **Appendix G. Agency NEPA Scoping Letter Responses**

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