North-South Segment 1,
Tier 2 Environmental Impact
Statement and Design Concept
Report

Draft Notice of Intent Supplemental Information Document

Arizona Department of Transportation Project # 999 PN 000 F0491





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1 Introduction

The Arizona Department of Transportation (ADOT) is performing engineering and environmental studies as part of the North-South Segment 1 Tier 2 Environmental Impact Statement (EIS) and Design Concept Report (DCR), US 60 to Arizona Farms Road (State Route [SR] 505). Completed in 2021, the Tier 1 EIS process established the 55-mile-long, 1,500foot-wide Selected Corridor Alternative between U.S. Highway 60 (US 60) and Interstate 10. The North-South Segment 1 EIS/DCR will identify an approximately 20-mile-long, 400foot-wide highway alignment between US 60 and Arizona Farms Road in Pinal County, Arizona (Figure 1 and Figure 2). The Tier 1 EIS documents are available on the project website at https://azdot.gov/planning/ transportation-studies/north-south-corridorstudy.

The environmental review, consultation, and other actions required by applicable federal

Mohave Coconino

Flagstaff

Yavapai

Apache

Phoenix
Apache
Junction
Graham

Vuma

B Maricopa
Pinal
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Cochise

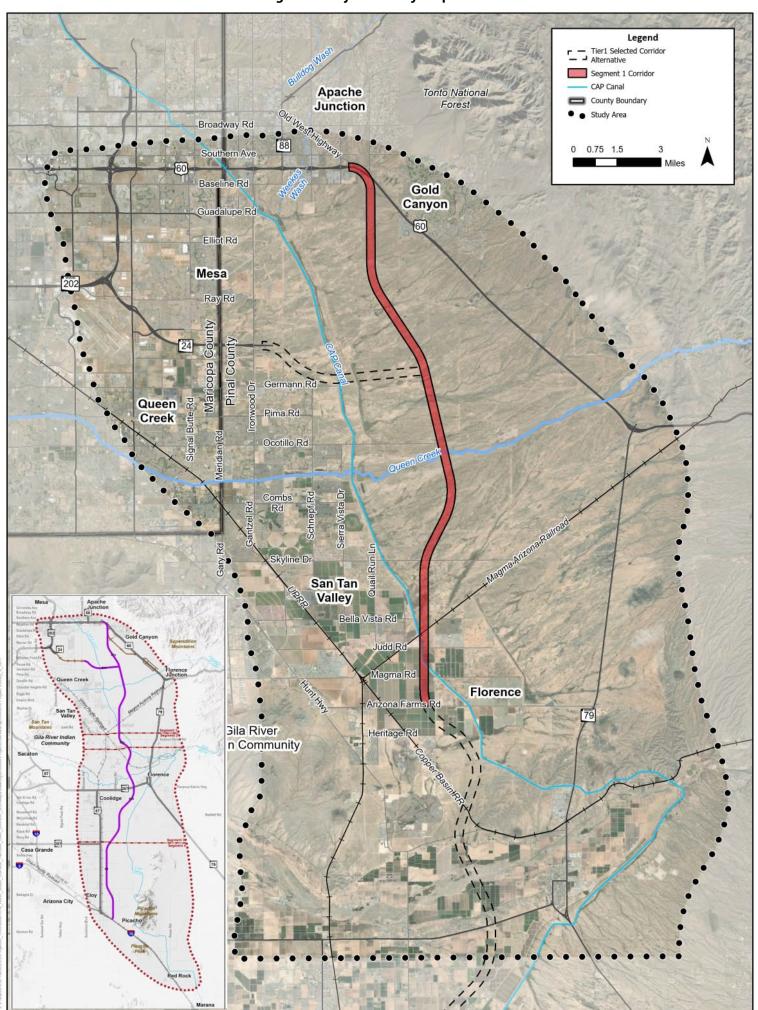
Santa
Cruz

environmental laws for this project are being, or have been, carried out by ADOT pursuant to 23 U.S. Code (U.S.C.) 327 and a Memorandum of Understanding dated June 25, 2024, and executed by the Federal Highway Administration and ADOT.

Since this Tier 2 study was initiated in 2023, efforts have included formally inviting agencies and Tribal governments to participate in the National Environmental Policy Act (NEPA) process, continuing coordinating with Cooperating and Participating agencies, conducting public outreach in August and September 2023, revisiting the project purpose and need established during the Tier 1 study, conducting preliminary data collection on existing conditions, developing preliminary alternatives for evaluation in the EIS process, and initiating development of EIS analysis methodologies specific to each resource section.

Cooperating and Participating agencies are described in the attached Project Coordination Plan (**Appendix A**). The Project Coordination Plan is a living document that is anticipated to evolve throughout this Tier 2 environmental review process and will be updated as needed. Agency coordination meetings were held starting in August 2023 and have continued to the date of this Notice of Intent (NOI). This includes an Agency Early Scoping Meeting held in August 2023, six (6) Cooperating Agency meetings held between April 2024 and March 2025, and sixteen (16) one-on-one coordination meetings on specific topics.

Figure 2. Project Vicinity Map





All Cooperating and Participating agencies are encouraged to provide input at these meetings. Cooperating Agency meetings will continue to be held throughout the EIS process.

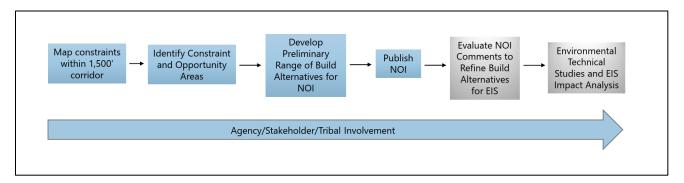
More information on the outreach tools, methods, and engagement opportunities that have been and will continue to be provided throughout the duration of the Tier 2 study, including major public engagement activities at key project milestones, can be found in the attached Public Involvement Plan (**Appendix B**). A summary of the agency scoping meeting and public involvement meetings held in August and September 2023 is available on the project website at https://azdot.gov/planning/transportation-studies/north-south-corridor-study-proposed-new-transportation-route-pinal.

ADOT has prepared the attached Preliminary Purpose and Need with a refined needs assessment specific to the Segment 1 study limits, which is an update from the Tier 1 EIS (**Appendix C**). ADOT first presented project purpose and need as part of the pre-NOI phase during the Agency Early Scoping Meeting in August 2023. The Preliminary Purpose and Need document was provided to Cooperating agencies prior to the publication of this NOI. Comments on the Preliminary Purpose and Need are welcomed during the NOI comment period. The Preliminary Purpose and Need may be revised based on comments received during the comment period on this NOI.

2 Build Alternative Development Process

The goal of the alternatives development process was to develop a preliminary range of build alternatives for an approximately 20-mile-long, 400-foot-wide highway alignment within the 1,500-foot-wide Tier 1 Selected Alternative between US 60 and Arizona Farms Road. ADOT mapped existing environmental and technical resources within the 1,500-foot Segment 1 Corridor to understand where constraints exist that should be avoided or impacts minimized and where there are areas of lower risk that present opportunities for preliminary horizontal alignment alternatives that could potentially result in fewer impacts. The constraint mapping process resulted in the preliminary range of end-to-end build alternatives presented in this NOI. The constraint mapping process is depicted in **Figure 3**.

Figure 3. Constraint Mapping Process



Map Constraints: Environmental and engineering technical data was collected on a broad range of environmental and engineering technical considerations for the entire 1,500-foot Segment 1 Corridor. Environmental technical data collected included Class III cultural resource surveys, biological resources habitat suitability assessments, initiation of wildlife movement field studies, an inventory of existing and



potential Section 4(f) resources, and initiation of delineation efforts to identify potential Waters of the United States (WOTUS). Some of these efforts, particularly the Class III cultural resource surveys, required long lead times and involved extensive background research, fieldwork, reporting, and agency consultation. Wildlife movement studies initiated in August 2023 will be ongoing through 2026. Engineering technical data included major utilities, drainage and floodplains, terrain, and other existing

features such as canals and railroad corridors. Constraint mapping data layers were developed in coordination with, or provided by, Cooperating agencies.

Identify Constraint Areas: Based on the conclusions and recommendations resulting from the constraint mapping process, a map of constraint areas was developed. The constraint areas represent areas where constraints are present based on preliminary data and information, and effort should be made to avoid and minimize potential impacts within those areas as the Tier 2 EIS is developed. Based upon initial technical evaluation as well as initial input from Cooperating agencies, constraint area mapping focused on environmental and technical constraints within the Segment 1 Corridor. Constraint areas are shown in **Figure 4**.

Develop Preliminary Build Alternatives: The constraint areas provided a basis for developing horizontal alignment alternatives. There are constraint areas throughout the corridor. The goal of this process was to avoid and minimize constraint areas where possible when developing preliminary alignment alternatives and to place preliminary alignment alternatives in opportunity areas (i.e., portions of the Segment 1 Corridor outside the constraint areas). In areas where constraints could not be entirely avoided, ADOT examined the nature of the underlying constraints to identify a range of alignment alternatives that could potentially minimize impacts. This step resulted in a preliminary range of horizontal alignment options that were then combined to create three preliminary end-to-end build alternatives.

Figure 4. Constraint Areas





3 Preliminary Range of Alternatives

The preliminary horizontal alignments described in **Section 3.1** were developed to provide a range of alignment alternatives through constrained areas. Three preliminary end-to-end build alternatives were assembled by combining pieces of those horizontal alignments, the proposed concept for the connection to US 60 described in **Section 3.2**, and potential interchange locations described in **Section 3.3**. All three preliminary build alternatives would require a new highway on a new alignment. At the NOI phase, the preliminary build alternatives are defined by a line in the center of the horizontal alignment. Further design detail such as the number of lanes, right-of-way footprint, and vertical profile will be developed as the environmental technical studies and DCR progress.

The preliminary range of alternatives includes the Preliminary No Build Alternative (**Section 3.4**), which consists of future conditions in 2050 without implementation of a new north-south freeway corridor. The No Build Alternative provides a baseline against which to consider impacts of the proposed action and the build alternatives in the EIS.

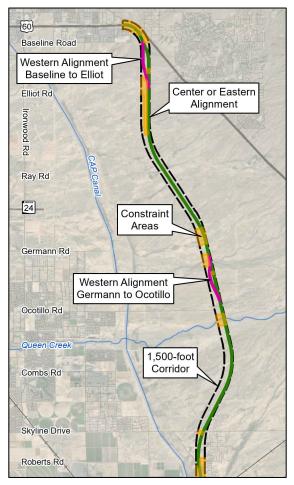
3.1 Preliminary Horizontal Alignments

US 60 to Roberts Road: In the northernmost 16 miles of the study area between US 60 and Roberts Road, ADOT has generally identified one preliminary build alternative that stays within the center and eastern zones of the Segment 1 Corridor (**Figure 5**), with two alignment alternatives in two areas:

- Baseline Road and Elliot Road: Western or eastern alignment; and
- Germann Road to Ocotillo Road: Western or eastern alignment.

The new freeway would connect with US 60 between Goldfield Road and Mountain View Road in Apache Junction, avoiding constraint areas along US 60. South of Elliot Road, the alignment transitions to the eastern side of the 1,500-foot Segment 1 Corridor to avoid overlap with an existing 500-kilovolt power line and other sensitive environmental resources. South of Ocotillo Road, all build alternatives would create a new crossing of Queen Creek. There are a number of constraints mapped within and surrounding Queen Creek, representing a variety of sensitive environmental resources. The preliminary range of alternatives includes an alignment crossing Queen Creek in the east zone. Based on the preliminary technical evaluation and input from agencies and Tribes, the eastern zone crossing of

Figure 5. Preliminary Alignments (US 60 to Roberts Road)

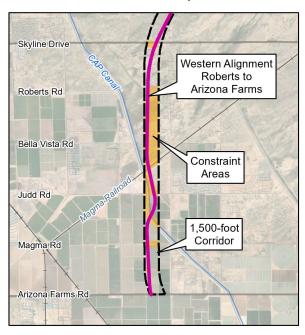




Queen Creek has the best potential to minimize impacts to environmental resource areas. The entirety of the 1,500-foot corridor between Baseline Road and Roberts Road extends through currently vacant and undeveloped Arizona State Trust land.

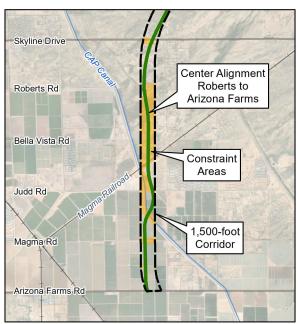
Roberts Road to Arizona Farms Road: In the southernmost 4 miles of the 1,500-foot corridor between Roberts Road and Arizona Farms Road, ADOT has identified three preliminary alignment alternatives that provide a range of alignments in the western, center, and eastern portions of the 1,500-foot corridor. All three preliminary alignment would require a new crossing of the Central Arizona Project (CAP) Canal and use a similar crossing of the canal south of Judd Road, whose location was identified to avoid overlap with a tract of Reclamation land that serves as a western burrowing owl relocation site. All three preliminary build alignments follow a similar alignment south of the CAP Canal crossing to the study limits at Arizona Farms Road.

Figure 6. Preliminary Western Alignment (Roberts Road to Arizona Farms Road)



- The western alignment (**Figure 6**) is the closest to the Sonoqui Dike. Compared with the center and eastern alignments, the western alignment would require the largest overlap with the Bureau of Reclamation (Reclamation) lands east of the canal that provide flood storage and wildlife habitat, but minimizes overlap with planned development near Judd Road. Between Bella Vista
 - Road and Judd Road, the alignment shifts east to achieve a crossing of the CAP Canal that is close to perpendicular.
- The center alternative (Figure 7) uses the center zone through the Reclamation lands east of the canal and is slightly farther away from the Sonoqui Dike compared to the west alternative but closer to planned development near Judd Road.
- The eastern alternative (Figure 8) shifts to the
 eastern portion of the 1,500-foot corridor
 between Roberts Road and Arizona Farms Road.
 The eastern alignment is the farthest away from
 the Sonoqui Dike and would require the
 smallest amount of overlap with Reclamation
 lands east of the canal. However, the eastern
 alignment is closest to planned development
 north of Judd Road.

Figure 7. Preliminary Center Alignment (Roberts Road to Arizona Farms Road)





Preliminary End-to-End Build Alternatives:

Three end-to-end preliminary build alternatives between US 60 and Arizona Farms Road were assembled by combining pieces of the west, center, or eastern alignments through constrained areas with the eastern or center single alignment through the remaining portions of the corridor. The three preliminary build alternatives may be refined following consideration of the comments received on the NOI. Additionally, during future EIS and DCR process, ADOT may recommend a different combination of the preliminary alignments in a hybrid alternative that is different than the preliminary end-to-end build alternatives in this NOI. The three preliminary end-to-end alternatives are shown in Figure 9 and described below.

Preliminary Alternative 1 combines the western alignment alternatives through constrained areas with the single eastern or

center alignment through the remaining portions of the corridor, between:

- Baseline Road and Elliott Road: Western Alignment
- Germann and Ocotillo: Western Alignment
- Roberts Road and Arizona Farms Road: Western Alignment

Preliminary Alternative 2 combines the center alignment alternative between Roberts Road and Magma Road, the eastern alignment alternative through other constrained areas, and the single eastern or center alignment through remaining portions of the corridor, between:

- Baseline Road and Elliott Road: Eastern Alignment
- Germann and Ocotillo: Eastern Alignment
- Roberts Road and Arizona Farms Road: Center Alignment

Preliminary Alternative 3 combines the eastern alignment alternative through constrained areas with the single eastern or center alignment through the remaining portions of the corridor, between:

- Baseline Road and Elliott Road: Eastern Alignment
- Germann and Ocotillo: Eastern Alignment
- Roberts Road and Arizona Farms Road: Eastern Alignment

Figure 8. Preliminary Eastern Alignment (Roberts Road to Arizona Farms Road)

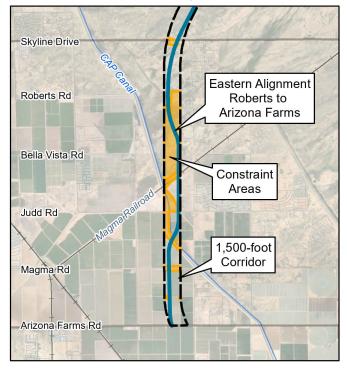
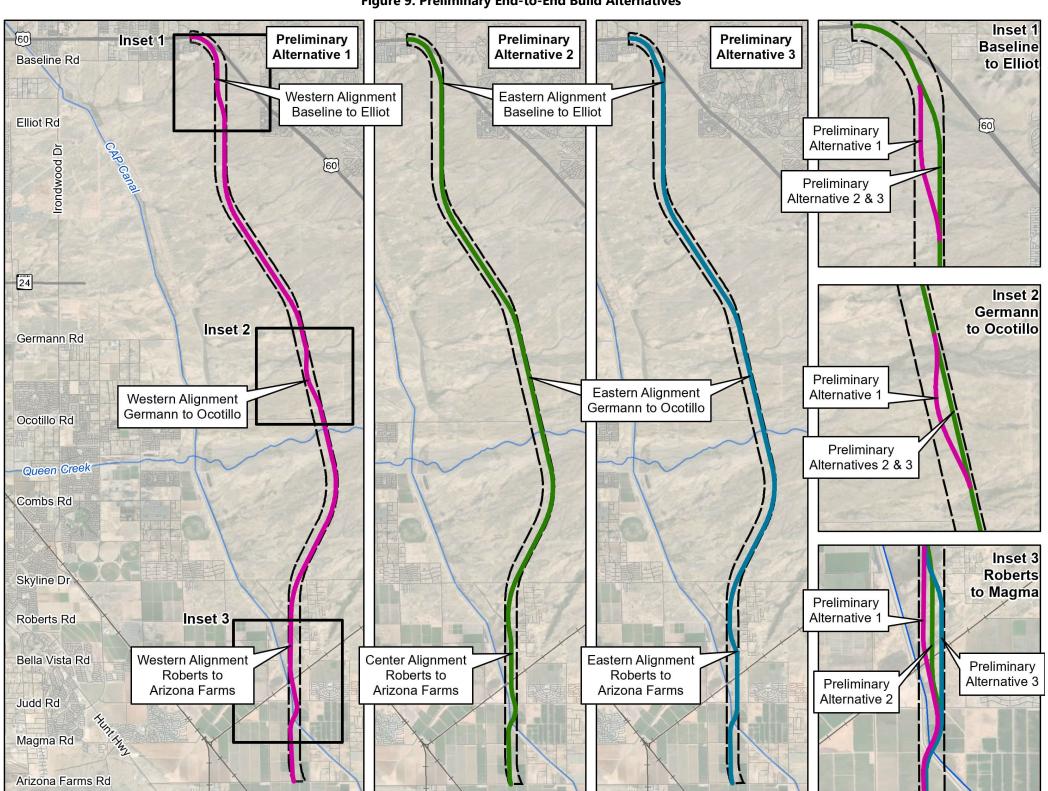


Figure 9. Preliminary End-to-End Build Alternatives





3.2 Preliminary Connection to U.S. Highway 60

The Tier 1 Selected Alternative followed a portion of the realignment of US 60, that was recommended in the DCR from ADOT's 2012 US 60 Alignment Study, Superstition Freeway to Florence Junction. However, subsequent regional and local planning efforts conducted by the Maricopa Association of Governments (MAG) and Pinal County no longer include the full realignment of US 60 and upgrading to an access-controlled freeway recommended in the 2012 ADOT DCR. Therefore, this Tier 2 study assumes that the US 60 bypass will not be constructed, and the existing US 60 (east of Goldfield Rd) will not be upgraded to an access-controlled facility. The existing US 60 highway to the east would remain as-is to provide local access with Gold Canyon. The northern terminus of Tier 2 Segment 1 would be co-located with the previous location identified for the US 60 bypass.

3.3 Preliminary Range of Potential Interchange Locations

The preliminary range of potential interchange locations identified in **Figure 10** will be further evaluated based on comments received on this NOI; engineering and environmental considerations; and further coordination with local agencies. The Draft EIS and Initial DCR are expected to include a refined list of traffic interchanges with more specific location information.

The Tier 1 EIS considered potential traffic interchanges within the Segment 1 study area. The number of traffic interchanges and their locations will be studied further and determined in this Tier 2 EIS/DCR. The potential traffic interchanges considered in the Tier 1 EIS were reviewed and preliminarily updated based on current regional planning, future functional classification, connectivity, and interchange spacing. It is desirable to consider interchanges that would provide access to higher functional classification roadways (major arterials rather than minor arterials) and that would provide greater regional connectivity while also striving to provide adequate spacing between interchanges. Gradeseparated crossings (without an interchange) could be considered between interchange locations.

The following list represents the preliminary range of potential interchange locations to be considered in the Tier 2 EIS, which includes four additional locations beyond those shown in the Tier 1 EIS:

- Houston Avenue
- Elliott Road
- Ray Road

Figure 10. Preliminary Range of Potential Interchange Locations





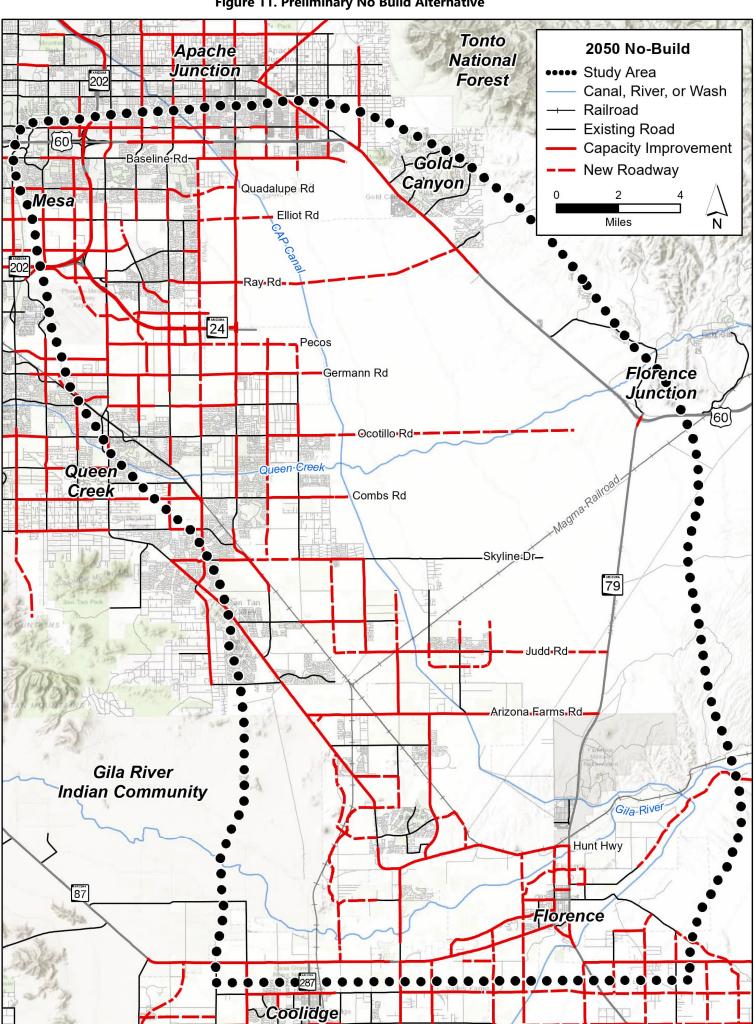
- SR 24
- Germann Road
- Ocotillo Road
- Combs Road/Riggs Road
- Skyline Drive
- Bella Vista Road
- Judd Road
- Arizona Farms Road

3.4 Preliminary No Build Alternative

In the Preliminary No Build Alternative, the North-South Corridor would not be in place; however, it is assumed projects funded in the MAG long-range Regional Transportation Plan (RTP), known as Momentum 2050, Regional Strategic Transportation Infrastructure Investment Plan, and the Transportation Improvement Program would be constructed by 2050. These programs include transportation projects across the MAG Planning Area. Examples of major improvements in the vicinity of the Segment 1 Corridor include converting SR 24 to a full freeway with overpasses at crossroads between SR 202L and Ironwood Drive, widening on Hunt Highway, new roadway segments or widening on Meridian Road and Crismon Road, and roadway widenings on Ellsworth Road and Southern Avenue. There is currently no funded long-range RTP in Pinal County, therefore the Preliminary No Build Alternative includes reasonably foreseeable transportation projects in Pinal County that are assumed to be implemented by 2050. The Preliminary No Build Alternative is shown in **Figure 11**. Examples of improvements within Pinal County include:

- Extension of east-west arterials:
 - Guadalupe Road, 1 mile east
 - Ray Road, 6 miles east to connect to US 60
 - o Pecos Road, 3 miles east
 - o Ocotillo Road, 8 miles east
 - Judd Road, 4 miles east to connect to SR 79
- New sections of the following north-south arterials:
 - o Idaho Road, 2 miles from Combs Road to Skyline Drive
 - o Sierra Vista Drive, 3 miles from Judd Road to Skyline Drive
- Widen portions of numerous north-south and east-west arterials

Figure 11. Preliminary No Build Alternative





4 Summary of Expected Impacts

The Tier 2 EIS will evaluate the potential social, economic, and environmental impacts resulting from the implementation of the build alternatives and the No Build Alternative. The following are anticipated to be the resources with expected impacts to be evaluated in detail during the environmental review process:

- Cultural and Historic Resources: A Class III archaeological survey was completed documenting 16
 archaeological sites determined or recommended eligible for listing in the National Register of
 Historic Places. An inventory of traditional cultural places and consultations with Tribal
 governments was also performed. The alternatives were developed to maximize opportunities to
 avoid and/or minimize cultural and historic resources. Continuing coordination and Section 106
 consultation with the State Historic Preservation Office, Tribes, and other consulting parties will be
 conducted during the EIS process.
- Biological Resources and Wildlife Connectivity: The project area supports primarily foraging habitat for monarch butterflies (Danaus plexippus) during the spring migration period, with no evidence of breeding habitat or resources found. The project area includes plants that are identified as important species by the Gila River Indian Community, may support species of importance to other Tribes, and should be considered as part of Tribal consultation. Impacts to a burrowing owl (Athene cunicularia) relocation site within the 1,500-foot Segment 1 Corridor will also be evaluated. Wildlife populations, including Migratory Bird Treaty Act-protected birds inhabiting the area will be impacted by the project through displacement or mortality via direct habitat loss or through longer-term wildlife habitat fragmentation and vehicle-caused mortality.
- Socioeconomics, Land Use, and Planned Development: The proposed highway footprint of all build alternatives includes lands managed or owned by the Arizona State Land Department (ASLD), Bureau of Land Management, Reclamation, CAP, and private landowners. Local jurisdictions' land use plans predict the currently undeveloped and agricultural areas in the 1,500-foot corridor will ultimately be converted to a mix of residential, commercial, and industrial land use. All build alternatives consist of a new highway on a new alignment that will require a substantial amount of new right-of-way. Most land within the 1,500-foot corridor is vacant and undeveloped and has the potential to convert existing, undeveloped ASLD land; privately owned vacant land; agricultural land' and Reclamation land to roadway right-of-way. The alternatives were developed to avoid and minimize potential displacements on existing residential and commercial development. ADOT will continue to work with affected stakeholders and designers to avoid, minimize, and mitigate potential impacts.
- WOTUS: All build alternatives would require a new crossing of Queen Creek, a potential WOTUS; coordination with the U.S. Army Corps of Engineers (USACE) has been ongoing. Project alternatives could require a Clean Water Act Section 404/401 permit from USACE. ADOT will continue to coordinate with USACE to design a crossing that avoids or minimizes impacts to WOTUS.
- Section 4(f): The build alternatives could result in permanent or temporary use of properties protected by Section 4(f) of the U.S. Department of Transportation Act within the study limits. A Section 4(f) Evaluation will be prepared to assess the potential permanent, temporary, constructive, or de minimis use of Section 4(f) properties, including 4f historic properties. All build alternatives would require crossing several planned trails, including the CAP recreation trail, Magma Arizona Railroad Trail, and multi-use trails proposed by Pinal County.



• *Noise*: An analysis of potential noise impacts to noise-sensitive receptors will be conducted. The anticipated increase in traffic noise from a new highway on a new alignment indicates that properties near the corridor could experience an increase in noise levels.

In addition to the evaluating the expected impacts and benefits to the known resources above, the Draft EIS will also identify impacts to farmlands; recreation; topography, geology, and soils; hydrology, floodplains, and water resources; energy; Section 6(f) resources; air quality; resilience and sustainability; transportation; hazardous waste sites; and visual resources. The effects of the No Build Alternative will be evaluated, including any significant environmental effects. The level of review of the identified resources for the EIS will be commensurate with the anticipated impacts to each resource from the proposed project and will also be governed by the statutory or regulatory requirements protecting those resources.

5 Anticipated Permits and Other Authorizations

Draft timetables for known permits and approvals are provided in the Project Coordination Plan (**Appendix A**). Additional permits and approval activities may be needed to issue a project decision document or construct the project:

- ADOT, Section 4(f) analysis
- USACE, Clean Water Act Section 404 permit and Arizona Department of Environmental Quality Section 401 Water Quality Certification
- U.S. Fish and Wildlife Service, Section 7 Endangered Species Act consultation
- Arizona Department of Environmental Quality, Section 401 Water Quality Certification
- Reclamation, CAP Canal vehicular bridge crossing
- ASLD right-of-way easement

During the EIS process, ADOT will work with the project's Cooperating agencies and other resource or land-managing agencies identified above to obtain further information on the approvals required and their time frames. The schedule for issuance of project permits and authorizations is dependent upon the timing of final design and construction, which is currently unknown. Once project funding is identified, ADOT will establish a schedule for issuance of all project permits and authorizations.

6 Study Schedule

A Tier 2 study schedule will be established as part of the requirements of the NEPA environmental review process under 23 U.S.C. 139 and will comply with 40 Code of Federal Regulations 1501.10(b)(2), which requires that environmental reviews for major infrastructure projects occur within 2 years and all necessary authorizations be issued efficiently and in a timely manner.

Public engagement activities for the Tier 2 study were initiated in August 2023. To date, ADOT has held one set of public information meetings (one virtual open house and two in-person open houses in September 2023). The timing of major study milestones is summarized in **Table 1**.



Table 1. Study Milestones

Milestone	Time Frame
Early Scoping	Completed September 2023
Project Coordination Plan	Completed December 2024
Preliminary Purpose and Need	March 2025
Develop Preliminary Range of Alternatives for NOI (Constraint Analysis)	January 2024 to March 2025
NOI	April 2025
Public Review of Draft EIS and Initial DCR	Summer 2026
Final EIS/Record of Decision and Final DCR	Spring 2027

7 Request for Input and Contact Information

With this NOI, ADOT requests and encourages state agencies, local agencies, Tribal governments, and the public to review the NOI and NOI Supplementary Information Document and submit comments on any aspect of the Tier 2 study. Specifically, agencies, Tribes, and the public are asked to comment on the Preliminary Purpose and Need, preliminary range of alternatives, the existing environmental conditions and potential impacts, and the identification of any relevant information, studies, or analyses concerning impacts affecting the quality of the human environment for consideration by ADOT and the Cooperating agencies in developing the Tier 2 Draft EIS. The purpose of this request is to bring relevant comments and information to ADOT's attention as early in the process as possible to enable the agencies to make maximum use of this information in decision-making. Any information presented herein, including the Preliminary Purpose and Need, preliminary range of alternatives, and identification of impacts, may be revised after consideration of the comments.