

SR 410 Sonoran Corridor Study,
Tier 2 EIS and DCR

Draft NOI Supplemental Information Document

Arizona Department of Transportation
Project # 999 PM 000 F0541
Pima County, Arizona

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1 Introduction

1.1 Background

The State Route 410 (SR 410) Sonoran Corridor is a major new transportation corridor proposed in Pima County, Arizona. It was designated by Congress as a high-priority corridor and future interstate facility under the Fixing America's Surface Transportation (FAST) Act. FHWA and ADOT prepared a Tier 1-level Environmental Impact Statement (EIS) for this study, and ADOT is now advancing it through preparation of a Tier 2 EIS. The Record of Decision (ROD) for the Sonoran Corridor Study's Tier 1 NEPA clearance was issued in October 2021.

The Tier 1 EIS established the need for a high-capacity transportation corridor in the area to address existing and future issues with development of the region resulting in increases of population and employment, increased congestion on interstate freeways and the local roadway network, the lack of existing or planned roadways in areas planned for growth, and increased freight movement through the study area. The EIS developed a number of corridor alternatives, evaluated the environmental impacts and engineering feasibility of the alternatives, and identified a selected corridor alternative. <https://azdot.gov/planning/transportation-studies/sonoran-corridor-sr-410-study/sonoran-corridor-sr-410-tier-1-environmental-impact-statement>

The Tier 1 ROD identified Alternative 7 as the selected 2,000-foot-wide corridor alternative (Figure 1-2). The current study will examine a number of 400-foot-wide alternative transportation alignments based on the selected Tier 1 alternative. This study will build upon the Tier 1 EIS and identify and evaluate the engineering and environmental considerations of various design concept alternatives and the No-preliminary build alternative for the corridor, refining the 2,000-foot corridor selected in the Tier 1 EIS to a proposed 400-foot freeway alignment.

The Sonoran Corridor Study Area is bounded to the west by Interstate Route 19 (I-19), and on the northeast by Interstate 10 (I-10) (Figure 1 and Figure 2). The Corridor Alternative selected in the Tier 1 EIS is 20.5 miles in length and originates at I-19 near El Toro Road in the Town of Sahuarita and extends east to the alignment of Alvernon Way, then heads north to Old Vail Road, terminating at I-10 in the vicinity of Rita Road.

ADOT is preparing a Draft Tier 2 EIS to document conditions and potential effects of the SR 410 Sonoran Corridor, a proposed high-capacity high-priority access-controlled corridor that connects I-19 and I-10, south of Tucson International Airport (TUS). This Tier 2 EIS and supporting studies, such as the Design Concept Report (DCR), represent the process undertaken to satisfy Title 40 of the Code of Federal Regulations (CFR) §1500-1508 and recent Council on Environmental Quality (CEQ) guidance. The Draft Tier 2 EIS will evaluate a reasonable range of alternatives against the no-build alternative and ultimately identify a preferred alternative. The environmental review, consultation, and other actions required by applicable federal 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 the Tier 2 study kickoff, data collection on environmental and design issues evaluated in the Tier 1 EIS have been updated with more recent studies and information, an agency early scoping meeting was held, a public outreach survey was conducted, agency and participating agencies have been identified and met with, and a preliminary range of alternatives have been developed.

Figure 1. Project Location Map

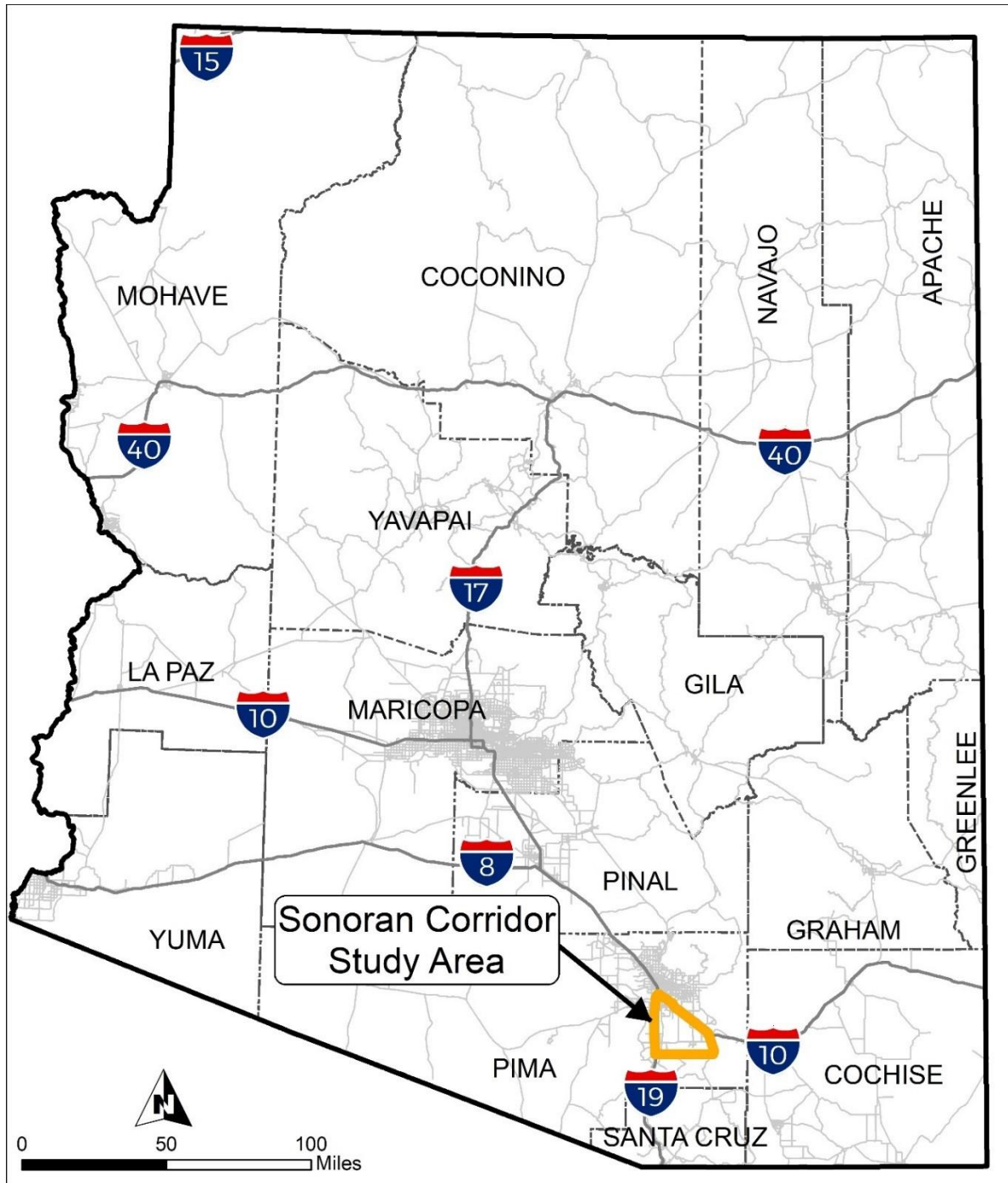
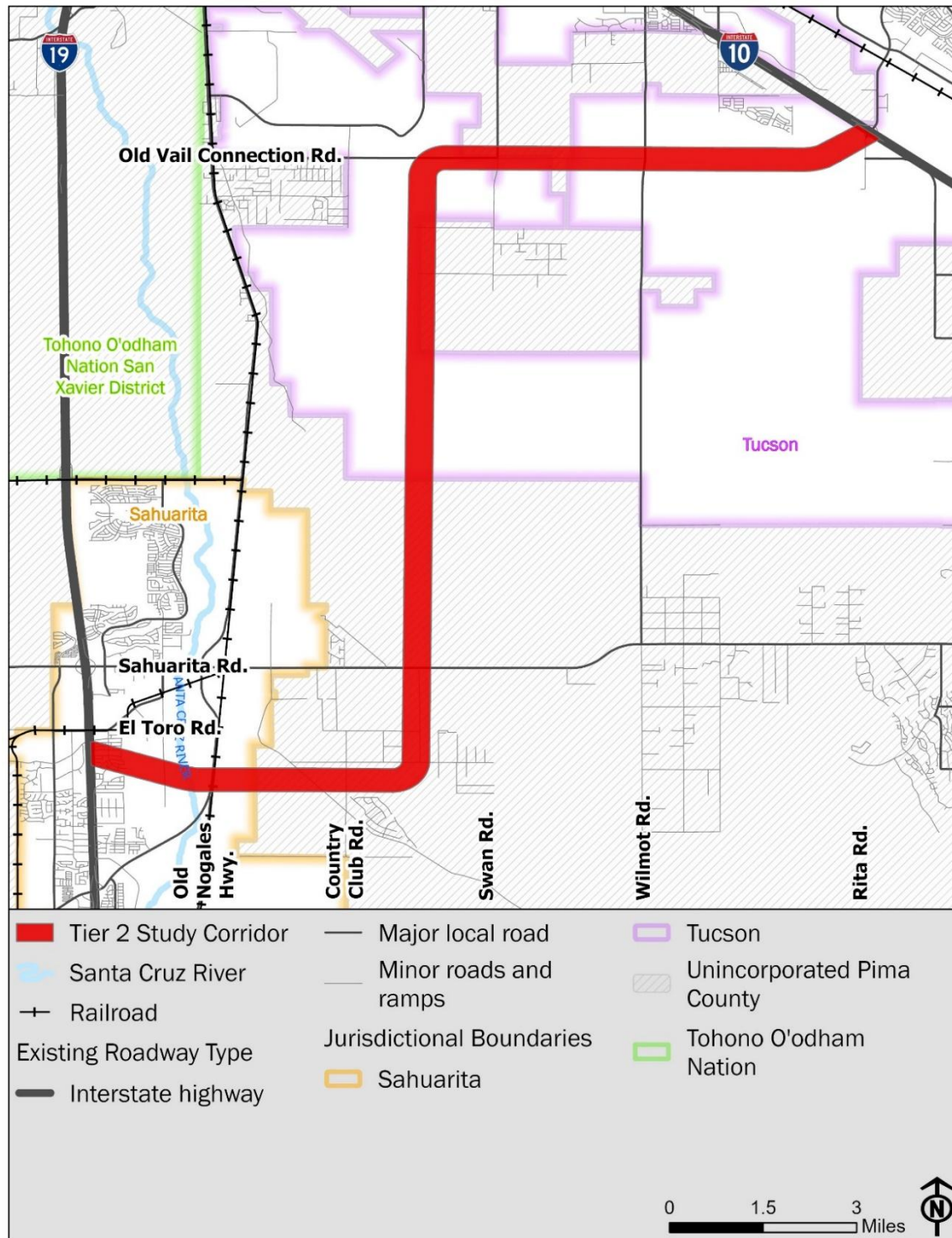


Figure 2. Project Vicinity Map



1.2 Pre-NOI Agency Coordination and Public Involvement

On February 27, 2024, ADOT notified the Tier 1 Cooperating and Participating Agencies and project area stakeholders of a planned early agency coordination/scoping meeting to be held on March 27, 2024.

1.2.1 Agency Coordination

The *Agency Coordination Plan* is available in **Appendix A**. The coordination plan facilitates and documents the lead agency's interaction with other agencies and describes how the coordination will be accomplished throughout the environmental review process. It promotes an efficient and streamlined process and sound project management through coordination, scheduling, and early resolution of issues. Agency coordination meetings completed include: an Agency Early Scoping Meeting held in March 2024, Cooperating Agency meetings held between February 2025 and May 2025, a Participating Agency meeting held in March 2025, monthly project team meetings, early Section 106 consultation, and one-on-one coordination meetings on specific topics.

1.2.2 Public Engagement

Public engagement activities for the Tier 2 EIS have included an initial public notification at the onset of the study and an online survey instrument in September 2024 to gather input on current and future transportation issues, alternative locations, interchange locations, and changes in conditions of the area. This survey also gathered feedback on the public support of the project's ability to serve the needs identified during the Tier 1 EIS. For 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, refer to the *Public Involvement Plan* in **Appendix B**.

2 Purpose and Need

This section is a summary of the *Preliminary Purpose and Need Report* (Appendix C) and describes the purpose of the Tier 2 study, the study needs, and additional objectives. The Purpose and Need is fundamental to compliance with the National Environmental Policy Act (NEPA) process and provides the basis for identifying, evaluating, and screening alternatives (Code of Federal Regulations Title 40 [40CFR] Chapter 5 §1502.13 [2017]). Population, employment, and future traffic projections in the study area were evaluated utilizing 2050 information from PAG. PAG is currently updating their Regional Mobility and Accessibility Plan (RMAP) for the horizon year of 2055. This study will utilize the updated information when it becomes available. The problems and issues that exist within or are influenced by the Sonoran Corridor study are:

- Population and employment growth – projected growth in the study area is predicted to increase travel demand with a limited transportation network.
- System linkages associated with regional, interstate, and international mobility – lack of a direct connection between I-19 and I-10 and activity centers including the Tucson International Airport (TUS) and employers, to the south of TUS.
- Congestion and roadway capacity – much of the transportation network

within the study area is expected to operate at an unacceptable level of service (LOS) by 2050 based on current PAG data.

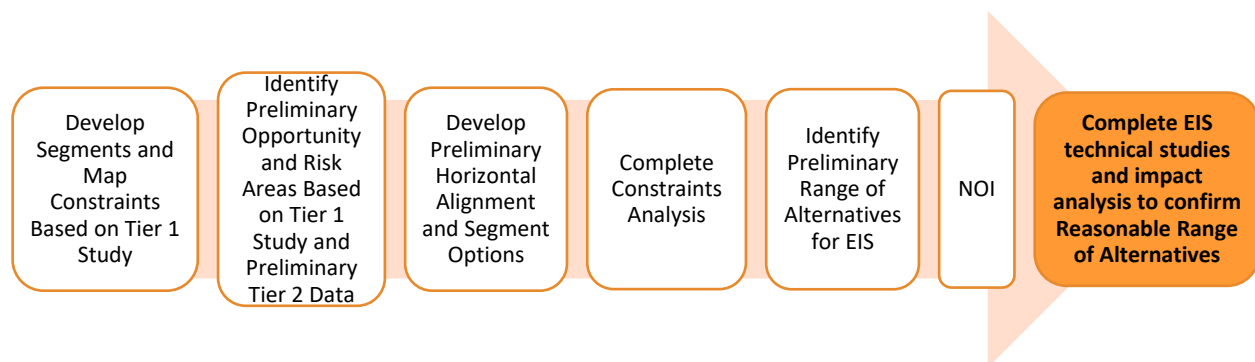
The overall purposes of the Sonoran Corridor are to provide a high-priority, high-capacity, access-controlled transportation corridor that will:

- Accommodate future travel demand associated with the forecast growth by affording better access throughout the study area
- Provide an alternate direct connection between I-19 and I-10 south of TUS that will reduce commercial and commuter travel times and cost
- Improve 2050 LOS within the study area

3 Preliminary Alternatives Development Process

The alternatives development process began with constraint mapping and evaluation to provide a preliminary range of alternatives within the Tier 2 Study Corridor from I-19 to I-10 to be studied further in the EIS. Figure 3 highlights the constraint mapping steps and methodology.

Figure 3. Constraint Mapping Methodology



3.1 Constraint Mapping Process

As shown in Figure 3, the Tier 2 study corridor was divided into three analysis segments and the known constraint information from the Tier 1 Study and preliminary Tier 2 data were mapped. Once the constraints and risks were mapped, opportunity areas with lower risk and fewer constraints were identified, which produced preliminary segment alignment options. An initial technical evaluation of engineering and environmental criteria was conducted, and a subsequent review was conducted for how the preliminary segment alignment options could connect into feasible end-to-end preliminary alignment alternatives. ADOT will continue to work with agency, public, and Tribal partners to further develop the alternatives in the EIS.

Map Constraints: The known constraints, concerns, and priorities that were identified in Chapter 2 of the 2021 Tier 1 EIS included:

- Existing and Planning Development
- Existing and Planned Open Space
- Existing Right-of-Way Corridors
- Topographic Conditions
- Existing and Planned Utilities
- Geology and Geotechnical Conditions
- Drainage, Waterways
- Corridor Opportunity Areas

Identify Constraint Areas: From the above Tier 1 constraints, the segments were further divided into the 400-foot-wide corridors to be considered part of the preliminary range of alternatives. The environmental and engineering technical data evaluated against the constraints included:

- Cultural resources
- Section 4(f)
- Clean Water Act/Section 404
- Hazardous materials
- Biology
- Prime and Unique Farmland
- Social and Economic Considerations
- Noise
- Drainage and Floodplains
- Major Utilities
- Terrain
- Existing feature crossings

The constraint evaluation process included both quantitative and qualitative measures. The metrics were evaluated for each preliminary alternative and as previously described, were based on information from the Tier 1 Study, initial Tier 2 study feedback, initial environmental fieldwork, and preliminary engineering analysis. This process helped identify locations where the constraints could be high risk and should be avoided or mitigated.

Agency, Tribal government, and public input on the Tier 2 study received to date was considered in developing the constraint evaluation criteria and mapping. The project-specific data layers used in this process were provided by or produced in coordination with Cooperating agencies, while additional data layers were obtained from regulatory or resource agencies. Input gathered during the initial stages of the Tier 2 study process was also included in the constraint evaluation.

3.2 Constraint Evaluation Results

The process identified avoidance areas as well as opportunity areas that guided where alignment options could be placed. Each technical consideration was evaluated independently, and the results of evaluation from each segment were compared to develop conceptual alignment options that connect each segment and address geometric design criteria for the future facility. This step applied roadway geometric design standards to create logical and feasible end-to-end alignment options that avoid, or minimize impacts to, critical constraints and maximize the use of the opportunity 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 alternatives.

4 Preliminary Alternatives

The outcome of the above process is a preliminary range of alternatives to be further evaluated in the EIS process. All three preliminary alternatives would require a new highway on a new alignment. At the NOI phase, the preliminary 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.

4.1 Preliminary Range of Alternatives

The proposed action is to build the Sonoran Corridor, a new high-capacity transportation corridor between I-19 and I-10. ADOT has identified three preliminary alternatives that provide a range of alignments in portions of the 2,000-foot-wide corridor:

Preliminary Alternative A, Figure 4: Consists of a new roadway approximately 20.53 miles in length, extending east from I-19 to the Alvernon Way alignment, centered within the Tier 2 Study Corridor, then traveling north along the Alvernon Way alignment to approximately the Old Vail Road alignment, centered within the Tier 2 Study Corridor, then traveling east along the Old Vail Road alignment, along the north edge of the Tier 2 Study Corridor, then ending at I-10, along the south edge of the Tier 2 Study Corridor.

Preliminary Alternative B, Figure 5: Consists of a new roadway approximately 20.40 miles in length, extending east from I-19 to the Alvernon Way alignment, along the south edge of the Tier 2 Study Corridor, then traveling north along the Alvernon Way alignment to approximately the Old Vail Road alignment, centered within the Tier 2 Study Corridor, then traveling east along the Old Vail Road alignment, along the north edge of the Tier 2 Study Corridor ending at I-10.

Preliminary Alternative C, Figure 6: Consists of a new roadway approximately 20.38 miles in length, extending east from I-19 to the Alvernon Way alignment, centered within the Tier 2 Study Corridor, then traveling north along the Alvernon Way alignment to approximately the Old Vail Road alignment, centered within the Tier 2 Study Corridor, then along the west edge of the Tier 2 Study Corridor as it approaches Old Vail Road, then traveling east along the Old Vail Road alignment, along the north edge of the Tier 2 Study Corridor ending at I-10.

All three preliminary alternatives are shown together in Figure 7. As the Tier 2 EIS and DCR progresses, further design details, right of way estimates, and environmental studies may require modifications to this preliminary range of alternatives., 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 preliminary range of alternatives includes the Preliminary No Build Alternative (Section 4.2), which consists of future conditions in 2050 without implementation of a new roadway corridor. The Preliminary No Build Alternative provides a baseline against which to consider impacts of the proposed action and the alternatives identified in the EIS.

Figure 4. Preliminary Alternative A Figure

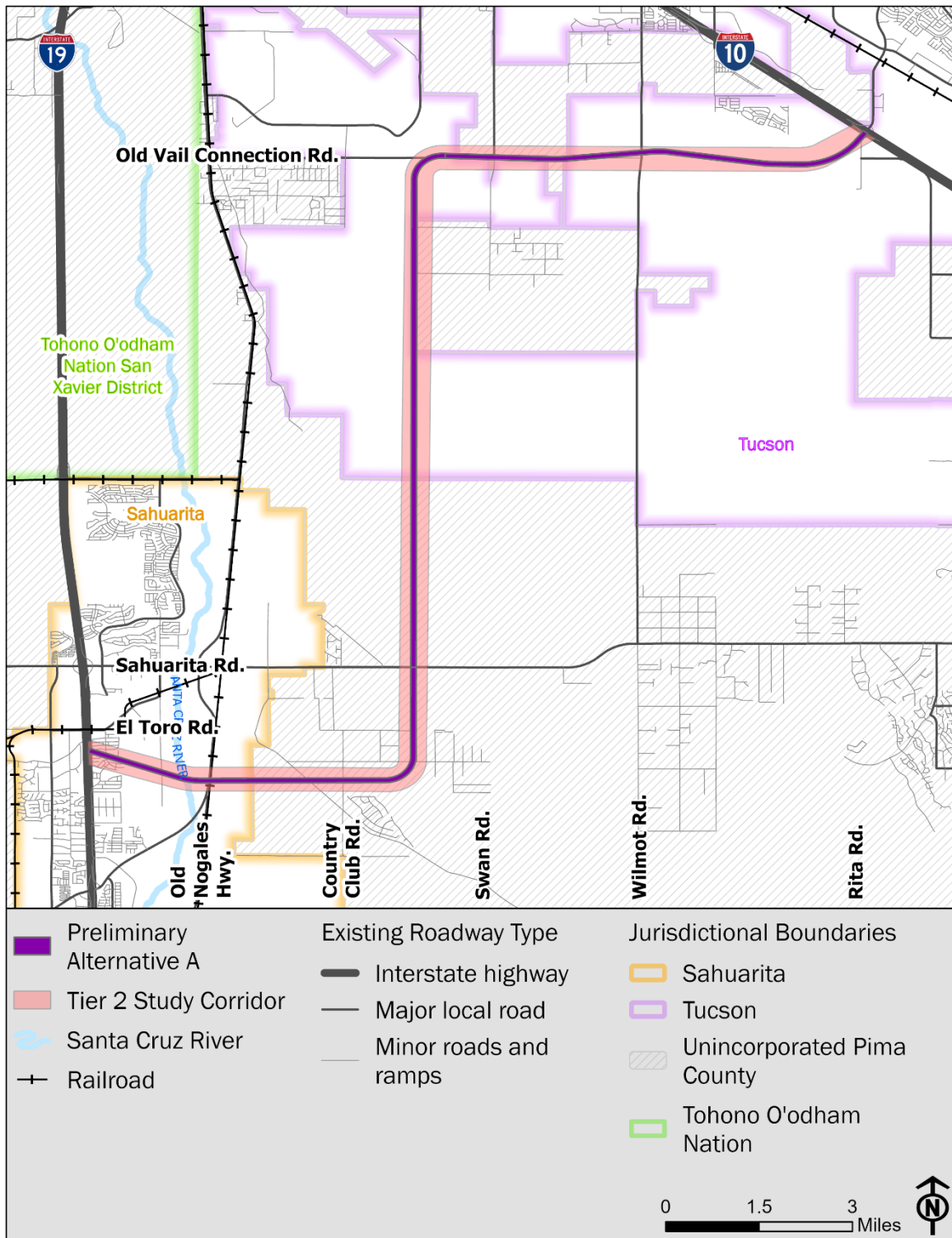


Figure 5. Preliminary Alternative B Figure

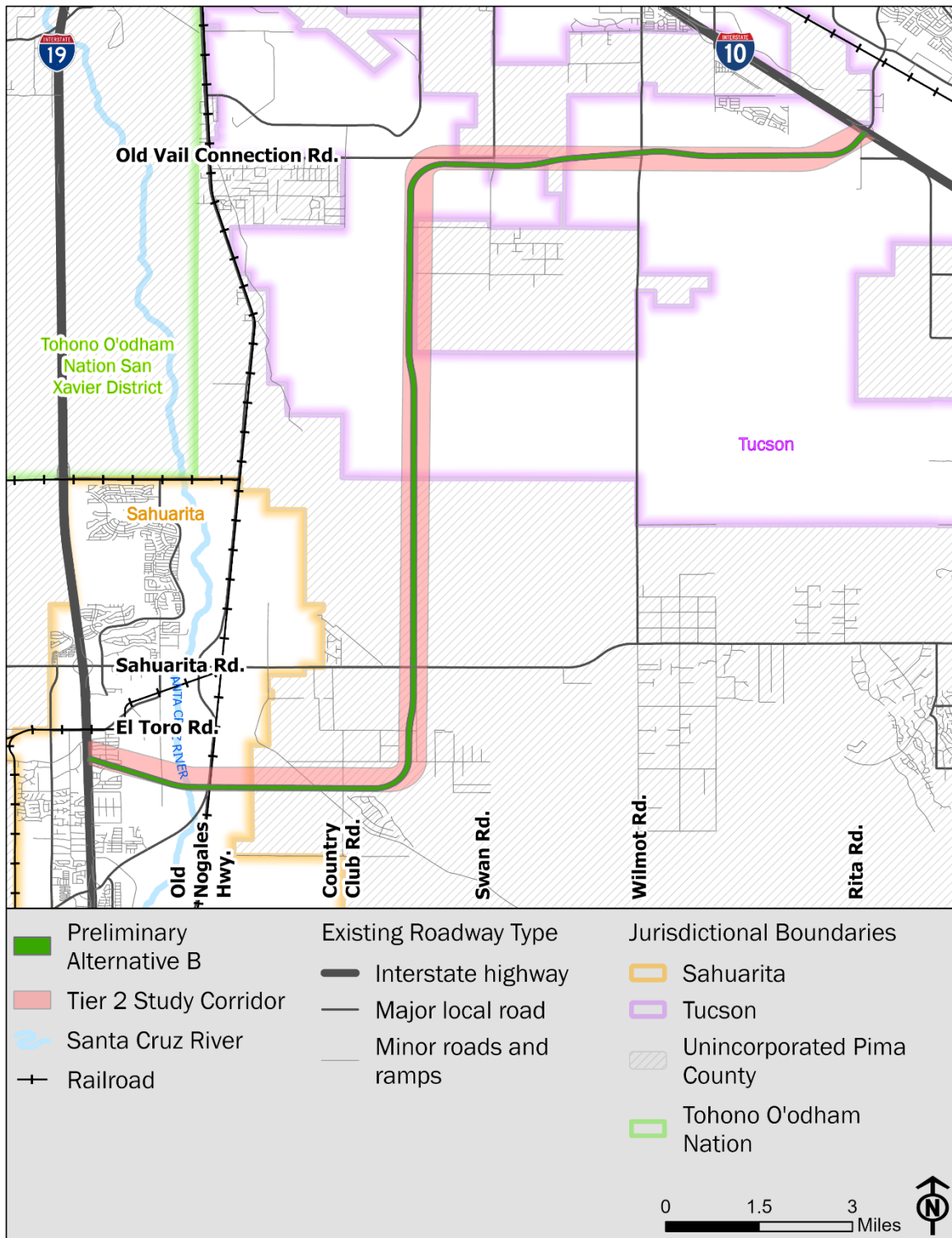


Figure 6. Preliminary Alternative C Figure

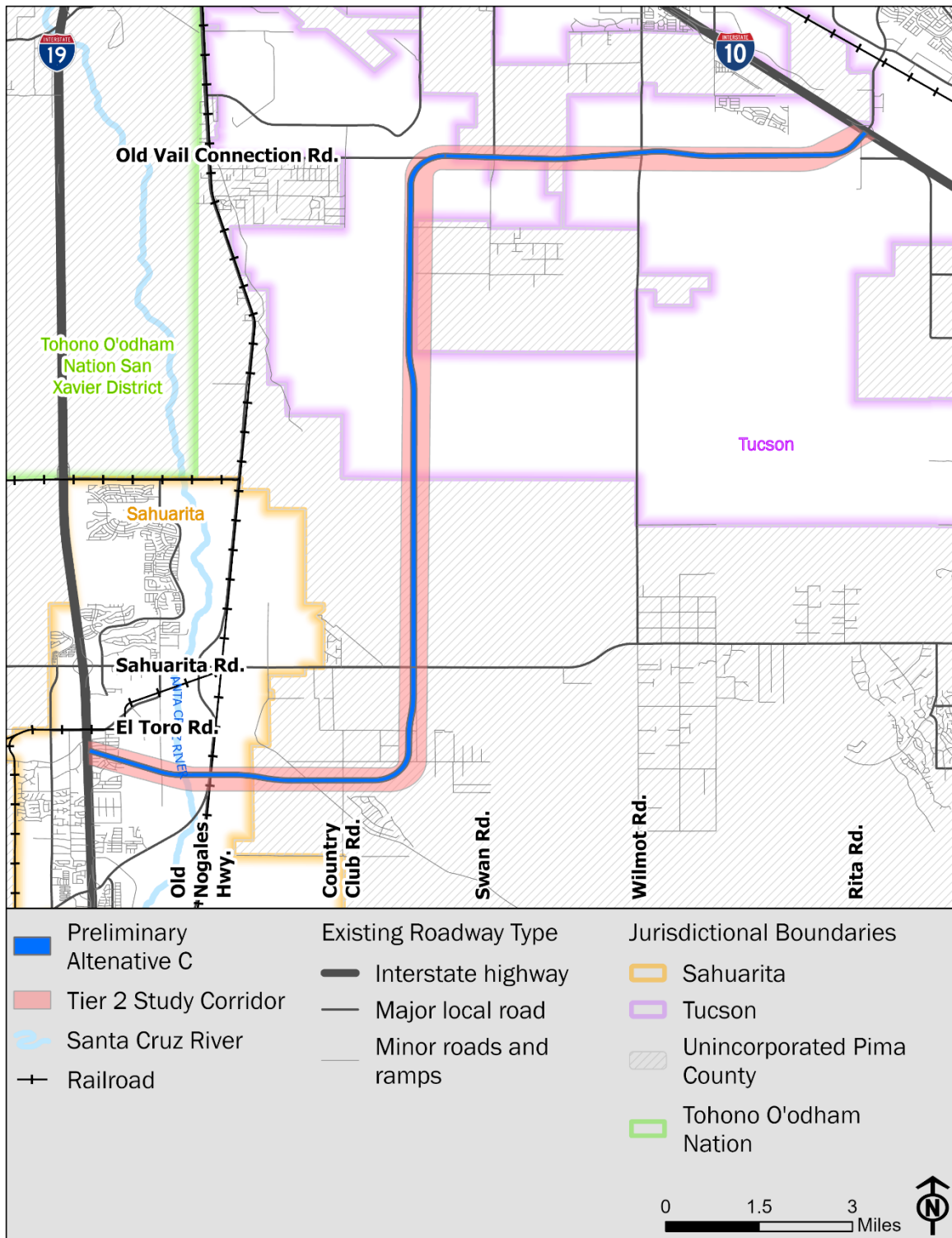
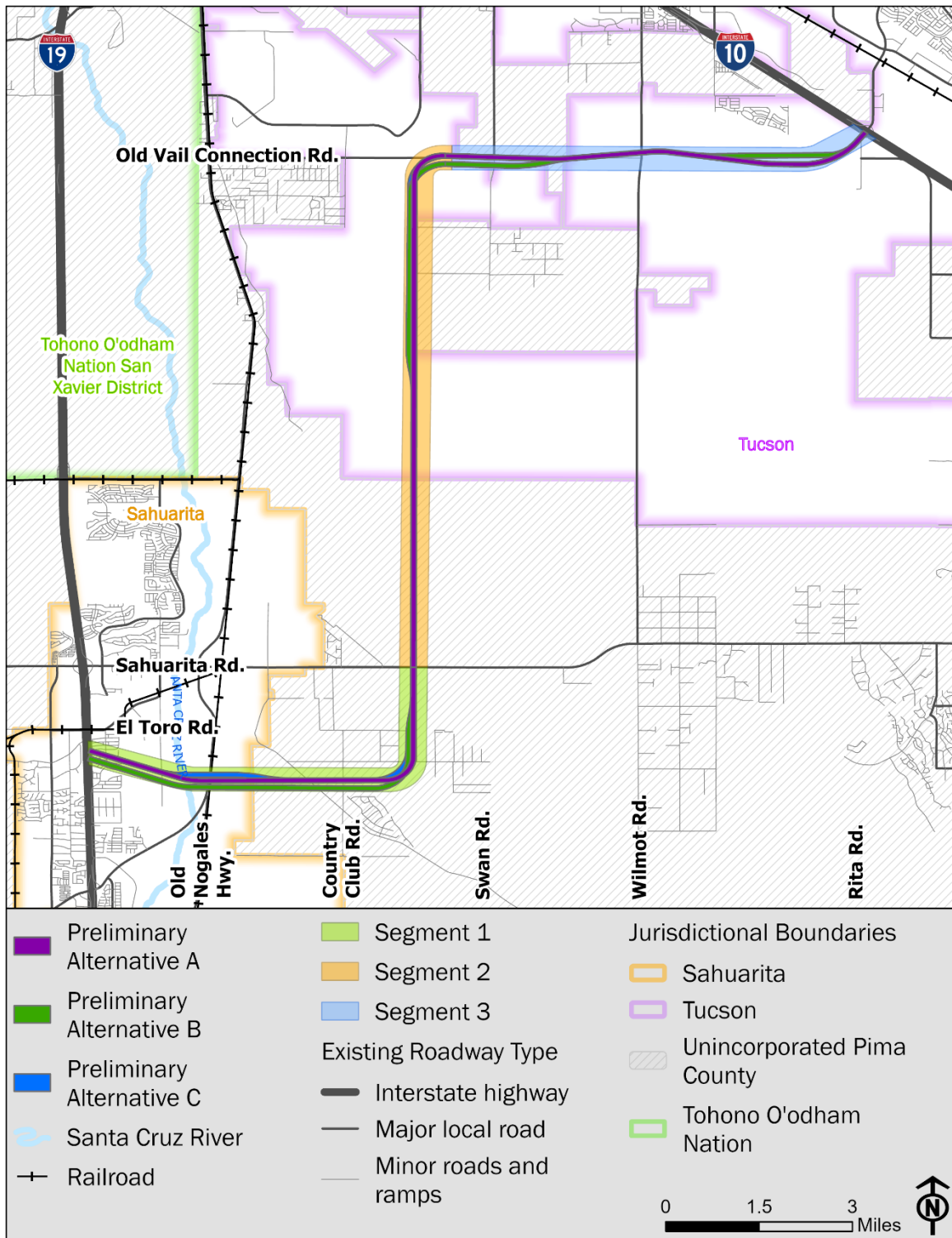


Figure 7. Tier 2 Segments and Preliminary Alternatives A, B, and C



4.2 Preliminary No Build Alternative

The No-Build Alternative serves as the baseline for comparison with all other alternatives and involves taking no action other than routine maintenance and other presently planned/programmed projects. It includes the existing regional transportation system plus the projects the region has already committed to fund.

The No-Build Alternative can include other programmed activities already in the Statewide Transportation Improvement Program (STIP) or Transportation Improvement Program (TIP), other nearby projects that have been constructed or approved, or long-term operations and maintenance activities that would occur even if the No-Build Alternative is selected.

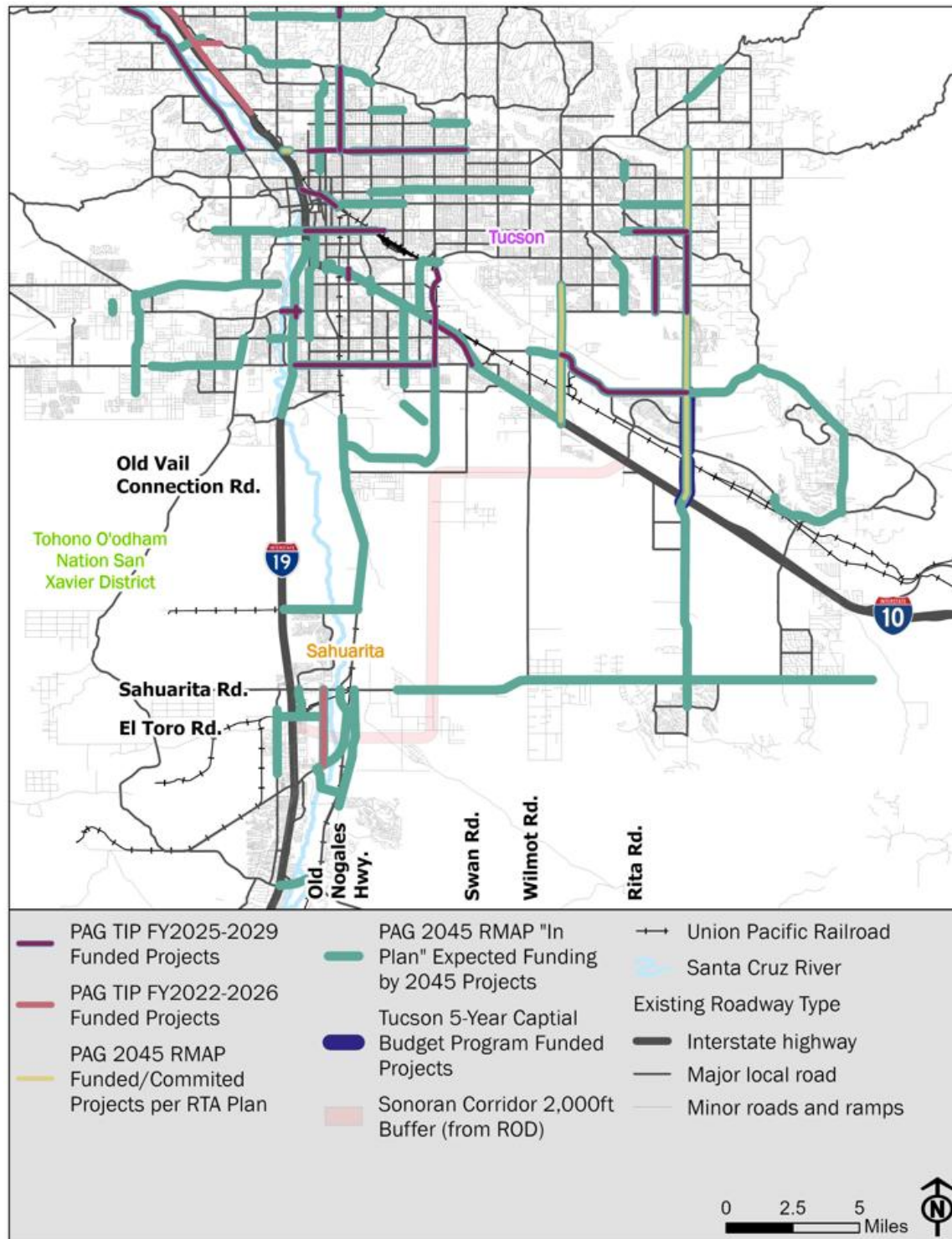
The Sonoran Corridor Tier 2 EIS will consider a No-Build alternative that would include the projected/planned roadway network detailed in various regional plans without the inclusion of the high-capacity, access-controlled transportation corridor from I-19 to I-10.

A comprehensive list and graphic were created to identify regional transportation construction projects within the Sonoran Corridor study area vicinity, and compiled using available information from the following sources:

- Pima Association of Governments (PAG) TIP Fiscal Year (FY)2025-2029,
- PAG TIP FY2022-2026,
- City of Tucson Geographic Information Systems (GIS) Project Portal (TucsonMoves),
- City of Tucson 5-Year Capital Budget Program,
- Arizona Department of Transportation (ADOT) 5-Year Transportation Program,
- Regional Transportation Authority (RTA) 2006 Mobility Plan, and
- PAG RMAP 2045.

The graphic (**Figure 8**) showcases the locations where transportation construction projects will occur prior to the 2050 horizon year. These projects include roadway widening projects, new roadway development projects, roadway improvement projects, and roadway extension/expansion projects.

Figure 8. No Build Alternative Figure



5 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. During the Tier 1 EIS, potential environmental impacts were evaluated on a broad scale. The EIS documents were subject to agency, Tribal government and public review, and their comments identified which environmental issues and considerations would require the most attention during the Tier 2 environmental review process. In addition, ADOT has initiated preliminary data collection during the Tier 2 pre-NOI phase to further explore those considerations. The following are anticipated to be the most sensitive environmental, economic and social concerns to be evaluated in detail during the environmental review process:

Cultural and Historic Resources: ADOT executed the Tier 1 Programmatic Agreement on August 24, 2021, which defines and outlines how individual Tier 2 projects would be carried out and how to satisfy the requirements of Section 106, pursuant to 36 CFR § 800. During the Tier 2 pre-NOI phase, a limited Class III archaeological survey was completed documenting archaeological sites determined or recommended eligible for listing in the National Register of Historic Places. 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: The project area supports habitat for several listed species including Pima pineapple cactus (*Coryphantha scheeri* var. *robustispina*), Cactus ferruginous pygmy-owl (*Glaucidium brasilianum cactorum*), Yellow-billed cuckoo (*Coccyzus americanus*), and monarch butterflies (*Danaus plexippus*). Field investigations have identified individual cacti within and adjacent to the study area. Surveys for other species are ongoing and are being coordinated with the US Fish and Wildlife Service (USFWS). Impacts to species and habitat will be evaluated through Section 7 consultation with USFWS as the study progresses beyond the NOI.

Wildlife Habitat and Connectivity: Wildlife populations 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. All preliminary build alternatives would require crossing the Santa Cruz and Lee Moore Wash wildlife corridors identified in the Pima County Wildlife Linkages Assessment. The incorporation of measures to minimize and mitigate impacts on wildlife will be informed by ongoing analysis and coordination with the Arizona Game and Fish Department.

Socioeconomics, Land Use, and Planned Development: The proposed highway footprint of all preliminary build alternatives includes public lands held in trust by the Arizona State Land Department (ASLD), and privately owned land. Local jurisdictions' land use plans predict the currently undeveloped areas within the study corridor will ultimately be converted to a mix of residential, commercial, and industrial land use. All preliminary alternatives consist of a new highway on a new alignment that will require a substantial amount of new ROW. Most of the land within the study corridor is generally vacant and undeveloped land and have the potential to be converted to roadway right-of-way. The preliminary alternatives have been initially developed to avoid or minimize to avoid or 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.

Waters of the United States (WOTUS): All preliminary build alternatives would require a new crossing of the Santa Cruz River, a potential WOTUS. Project alternatives could require a Clean Water Act Section 404/401 permit from US Army Corps of Engineers (USACE). ADOT will continue to coordinate with USACE to design a crossing that minimizes impacts to WOTUS and includes the least environmentally damaging practicable alternative (LEDPA).

Section 4(f): The preliminary build alternatives could result in permanent or temporary use of properties protected by Section 4(f) of the USDOT Act within the study limits. An evaluation of Section 4(f) properties will be included in the Tier 2 EIS to assess the potential permanent, temporary, constructive or *de minimis* use of Section 4(f) properties, including historic properties. All preliminary build alternatives would require crossing several planned trails, including the Juan Bautista de Anza National Historic Trail and multi-use trails proposed by Pima County and the Town of Sahuarita.

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

In addition to evaluating the expected impacts and benefits to the known resources above, the DEIS will also identify impacts to farmlands, recreation resources, topography, geology, and soils, hydrology, floodplains, and water resources, energy, Section 6(f) resources, air quality, 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 be governed by the statutory or regulatory requirements protecting those resources. Additional information on the expected impacts is provided on the project website as noted in the ADDRESSES section of the NOI. Comments on the expected impacts to be analyzed in the Tier 2 EIS are welcomed during the comment period for this NOI.

6 Anticipated Permits and Other Authorizations

Anticipated permits and authorizations that could be required prior to the commencement of construction include:

- USACE approvals under section 404 of the Clean Water Act;
- Arizona State Land Department (ASLD) approval for a ROW easement;
- FAA authorization of land acquisition near TUS;
- FHWA approval under section 4(f) of the U.S. Department of Transportation Act, which will be carried out by ADOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated June 25, 2024, and executed by the FHWA and ADOT;
- State Historic Preservation Officer (SHPO) consultation under Section 106 of the National Historic Preservation Act;
- U.S. Fish and Wildlife Service (USFWS) approvals under the Endangered Species Act, the Bald and Golden Eagle Protection Act, and Migratory Bird Treaty Act; and
- Natural Resources Conservation Service (NRCS) approval under the Farmland Protection Policy Act for the conversion of farmland.

7 Study Schedule

Key milestones for the Tier 2 EIS have been developed to meet the requirements of 40 CFR 1501.10(b)(2), which stipulates that the NEPA review for an EIS should be completed two years after the date on which the NOI is issued. Following the issuance of this NOI, FHWA and ADOT will coordinate with the Participating and

Cooperating Agencies to develop study documentation and the EIS. The anticipated schedule is shown in Table 1.

Table 1. Study Milestones

Milestone	Description	Anticipated Timing
Early public outreach	An online survey was conducted to solicit public input on current and future transportation issues, alternative locations, interchange locations, and changes in conditions of the area.	September 2024
NOI and report published in the Federal Register	The NOI notifies agencies and the public of the intent to prepare an Environmental Impact Statement.	May 2025
Public Scoping Meeting	Meetings will be held to collect information on location-specific and corridor issues, study concerns, preliminary purpose and need, and feedback on proposed preliminary range of alternatives.	June 2025
Range of alternatives for evaluation in the EIS	ADOT will evaluate a reasonable range of alternatives for evaluation in the EIS.	September 2025
Range of alternatives public information meeting	Meetings will be held to collect feedback on the range of alternatives and interchange locations.	February 2026
Draft EIS Notice of Availability (NOA)	The Draft EIS analyzes potential environmental effects resulting from alternatives to the proposed action and recommends a preferred alternative. The NOA announces the start of the public review and comment period.	October 2026
Draft EIS Public Hearings	Public hearings will be held to provide the public with an opportunity to learn more about the Draft EIS, ask questions, and submit comments related to the Tier 2 Study EIS.	November 2026
Final EIS/Record of Decision (ROD)	The Final EIS will address comments on the Draft EIS and provide the basis for selection of the Selected Alternative. The ROD will identify alternatives considered by the agency in determining a decision for the Selected Alternative.	October 2027

8 Request for Input and Contact Information

The NOI Supplementary Information Document includes a preliminary statement of Purpose and Need, a description of the alternatives to be considered, the Agency Coordination Plan and permitting timetable, the Public Involvement Plan and a NEPA Milestone Schedule. 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, proposed EIS 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 DEIS.

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.

Comments must be received by July 1, 2025. Comments or questions concerning this proposed action, including the comments relative to the preliminary EIS alternatives, information and analyses, should be directed to ADOT at the addresses provided in the ADDRESSES section of the NOI.