



Arizona Department of Transportation

Purpose and Need Memorandum

State Route 410 - I-19 to I-10 - Design Concept Report and Tier 2 Environmental Impact Statement

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.C. 327 and a Memorandum of Understanding dated June 25, 2024, and executed by FHWA and ADOT.

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1 PURPOSE AND NEED

1.1 Summary

The Arizona Department of Transportation (ADOT) has developed this Purpose and Need Memorandum for the State Route 410 (SR 410) Sonoran Corridor, a proposed transportation facility, as an early step in preparing a Tier 2 Environmental Impact Statement (EIS). This memorandum builds on the needs defined during the Tier 1 process and provides background information on the evolution and planning context of the Sonoran Corridor. It outlines the factors that contribute to the needs that exist within the Corridor study area (Figure 1) and presents the overall purpose of the Sonoran Corridor. 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]). 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 within an area with a transportation network that needs improvement.
- System linkages associated with regional, interstate, and international mobility – lack of a direct connection between Interstate 19 (I-19) and Interstate 10 (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.

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 forecasted 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

1.2 Introduction

1.2.1 Purpose of this Memorandum

As required by NEPA (42 United States Code [U.S.C.] 4371 et seq.), ADOT has developed this memorandum to re-evaluate, update, and affirm if the need for a transportation corridor identified in the Tier 1 EIS remains within the SR 410 Sonoran Corridor study area. Following the evaluation of the purpose and need for the study, ADOT will focus on the corridor selected in the Tier 1 EIS to develop alternatives that would meet the need and purpose of this proposed facility.

1.2.2 Background and Study Description

The SR 410 Sonoran Corridor Study 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 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 EIS was issued in 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.

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 1-1 and Figure 1-2). The Corridor Alternative selected in the Tier 1 EIS 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 Interstate Route 10 (I-10) in the vicinity of Rita Road.

The proposed Sonoran Corridor has been acknowledged in local, regional, and statewide plans to achieve identified transportation objectives including \$600,000,000.00 for right-of-way (ROW) acquisition in PAG's 2045 Regional Mobility and Accessibility Plan Update. Several of these plans are listed below, with the authors in parentheses.

- City of Tucson Major Streets and Routes Map, Amended 1/20/2016
- 2019-2023 State Transportation Improvement Program (ADOT)
- FY 2025-FY2029 Transportation Improvement Program (PAG)

In September 2024 a public outreach effort was conducted using an online survey instrument 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.

This memorandum re-evaluates the factors that contribute to problems (needs) that exist within the study area and presents the overall solutions (purpose) of the SR 410 Sonoran Corridor in compliance with the NEPA process. The purpose and need presented herein provides the foundation for the process undertaken to identify, evaluate, and screen alternatives which will be developed.

The decision to be made as a culmination of the Tier 2 EIS process is selection of a transportation alignment generally within the selected Tier 1 2,000-foot-wide corridor that would accommodate the ultimate configuration of SR 410 Sonoran Corridor and the development of a project to accommodate the needs of the target year of 2050 or to select the No-Build Alternative.

1.2.1 Planning Context

In December 2015, the US Congress approved the Fixing America's Surface Transportation (FAST) Act (Public Law [P.L.] 114-94), a 5-year legislation to improve the nation's surface transportation infrastructure. Section 1416 of the FAST Act formally designates the Sonoran Corridor "along State Route 410 connecting I-19 and I-10 south of the Tucson International Airport" (TUS) as a high-priority corridor on the National Highway System.

Previous regional transportation planning efforts in Pima County, Arizona, have included a major transportation facility in the area south of TUS, between I-19 and I-10, referred to as the Sonoran Corridor (Pima County, Sonoran Corridor Alternatives Analysis, 2013; Pima Association of Governments [PAG], Regionally Significant Corridors Study, 2014; Pima County, Sonoran Corridor Economic and Revenue Impact Analysis, 2015). These previous studies and others have identified a need for a transportation system that would accommodate future growth and strengthen the growing economy of southern Arizona by improving the connection between Mexico and Arizona, New Mexico, and Texas in the US.

In addition to transportation plans, several other planning efforts are relevant to this study and include information on multimodal methods of transportation, freight rail movement, utility corridors as well as the potential for the use of technological advances in transportation projects. Following is more information on these topics.

Multimodal Characteristics

In a 2016 Long-Range Transportation Plan progress update (ADOT, 2016a), Arizona's economic outlook was forecast to outpace the nation in terms of jobs, population, and real income growth. Economic growth on this scale would result in impacts to the existing multimodal transportation system. In addition to highways, rail facilities and services exist within the study area and are part of the *Arizona State Freight Plan* (ADOT 2016). In addition, comments on the Tier 1 EIS for the ADOT Passenger Rail Corridor Study, Tucson to Phoenix advocated potential passenger rail access to TUS (ADOT, 2016b). These independent studies examined future needs regarding rail service within or near the study area and, as a result, the potential of a future rail connection is maintained as an option in the corridor cross-section.

Freight and Rail

A high percentage of the truck and rail freight movements to and from the US-Mexico border travels through the study area. The Arizona-Mexico Commission (AMC) and US Department of Transportation (USDOT) Research and Innovative Technology Administration (RITA) indicate commerce in the form of freight trucks, trains, and containers is increasing. Annual incoming freight truck container crossings from Mexico exceeded 4.5 million in 2018, representing a notable 8-year growth from approximately 3.2 million in 2010 (Eller, 2018).

The Arizona State Freight Plan presented immediate and long-range plans for freight-related transportation investments and identified facilities critical to Arizona's economic growth. ADOT reviewed key freight sectors and their contribution to Arizona's economy and identified freight mobility constraints within the study area. Constraints include freeway congestion bottlenecks, limited east-west rail infrastructure, and railroads crossing roads at grade (ADOT, 2016), as well as limited capacity and increasing volumes at the connection between I-19 and I-10 south of TUS (Figure 1-2).

The Union Pacific Railroad (UPRR) is a Class I railway (one having annual carrier operating revenues of \$250 million or more in 1991 dollars) with operations in the study area. UPRR serves the southern half of Arizona with main line service along the east-west Sunset Route that generally parallels I-10, along with branch service on the Nogales Branch from Tucson to the DeConcini port of entry in Nogales.

Adequate capacity is available for current and near-term anticipated demand (ADOT, 2011), but the need potentially exists for improved operations between the Nogales Branch and the Sunset Route within the study area to accommodate future demand.

Regional and global trade patterns indicate that east-west freight movements to and from Mexico may grow in the future. Existing east-west freight rail routes through the Tucson region require traversing a congested urban area. Privately held railroads would be responsible for building additional rail capacity if opportunities arise to address a need for future freight requirements. While no specific facilities within the study area have been studied or funding identified for future development, the Federal Railroad Administration accepted the role of a Participating Agency in the development of the Sonoran Corridor Draft Tier 1 EIS. ADOT will continue to coordinate with the affected agencies that have jurisdiction over rail throughout the environmental review process.

Utilities

ADOT has engaged utility and energy industry stakeholders in other studies and invited them to provide data and share options and ideas on decision points. Utility providers typically only invest in additional infrastructure as demand merits. Participants in ADOT's energy stakeholder outreach indicated long-range utilities or energy corridors are under development in the study area to serve expanding utility and energy needs. Thus, long-term flexibility should be considered for a common or consolidated corridor within the study area.

As the need for increased utility capacity is identified to meet increased demand in the future, privately held utility companies will be responsible for such investments. Corridor alternatives will be developed to accommodate co-location of utilities within the overall corridor so they would not be precluded from consideration.

Figure 1-1. Study Area

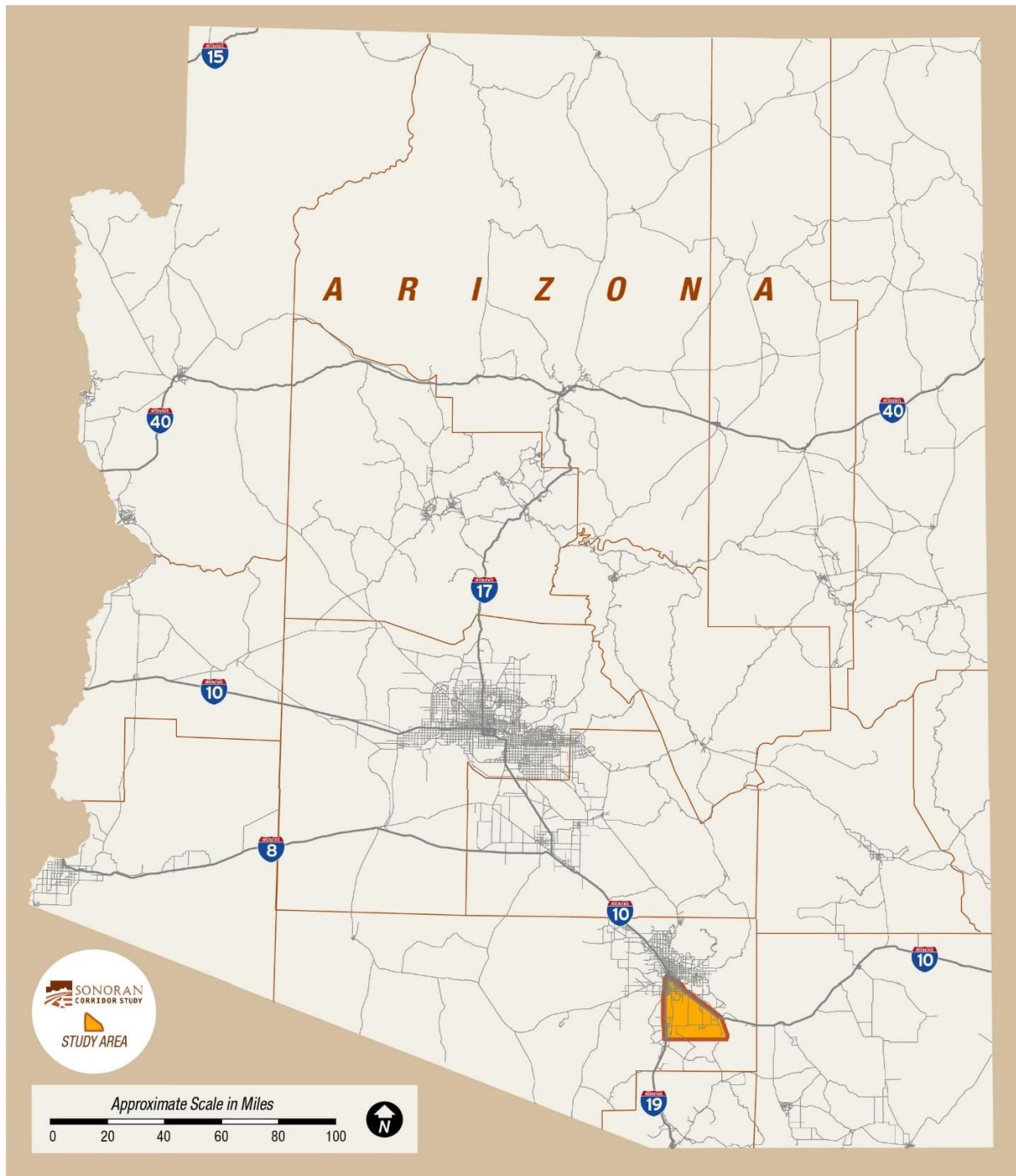


Figure from Tier 1 EIS

Figure 1-2. Tier 1 Selected Alternative

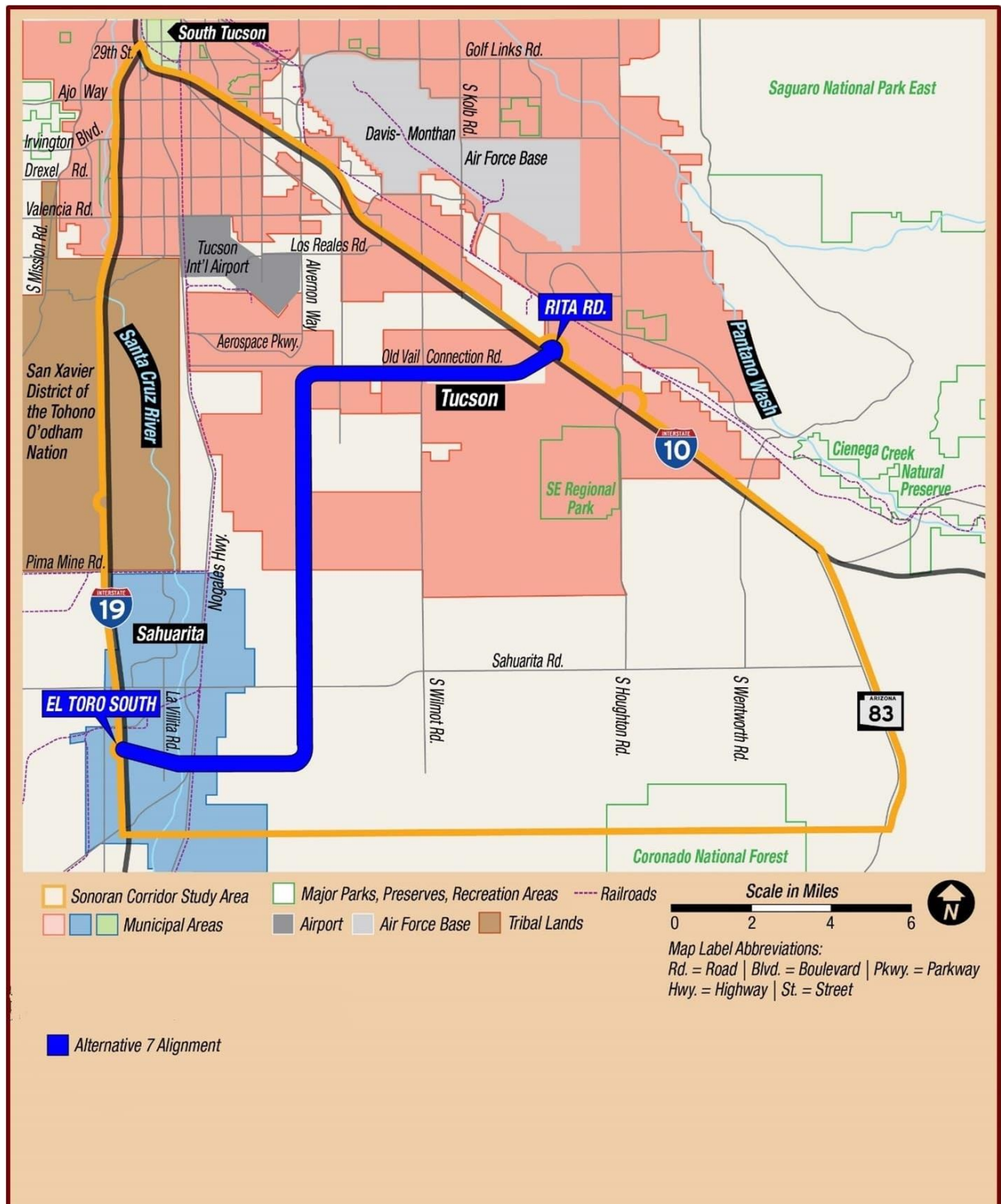


Figure from Tier 1 EIS

Technology

The Tier 1 EIS recognized that technology in transportation is changing rapidly, and the research and development of autonomous vehicles, connected vehicles, and other advancements are ongoing. While some of these technologies may affect capacity needs, the nature and pace of change is still uncertain. USDOT's Intelligent Transportation Systems (ITS) Joint Program Office is conducting research to advance transportation safety, mobility, and environmental sustainability through the application of electronic and information technology (USDOT, 2017).

Depending on demand, as identified through regional transportation planning processes, technology in transportation could be advanced during the development of future highway projects. It is expected that volume projections will account for the pace of technological change over time. Implementation of new facilities such as the Sonoran Corridor, or expansion of existing facilities, could be reassessed based on changing transportation needs. For example, technological advances could allow more efficient use of the existing transportation network.

Opportunities for innovations that promote sustainability, improve water quality, reduce storm water runoff, save energy, and maintain air quality, while providing educational opportunities and stimulating business and job growth will be evaluated as alternatives are developed as part of this Tier 2 EIS/DCR.

1.3 Identification of Purpose and need

An early step in preparing an EIS is to develop a concise description of transportation problem(s) or other need(s) that exist in a defined study area and the purpose(s) or outcome(s) sought in addressing them. The EIS process continues with identification and evaluation of a reasonable range of alternative solutions that would meet these defined needs and purposes of a proposed action. The purpose and need statement effectively provides the basis for developing a reasonable range of alternatives and informing the selection of an alternative that best meets those criteria.

1.3.1 Need for the Proposed Transportation Facility

The Tier 1 EIS and other previous studies have identified key transportation needs and issues in the study area, which have been further defined through agency and tribal coordination and public involvement during the Early Scoping process.

Based on a reevaluation of the needs identified in the Tier 1 EIS and the public survey, the following needs exist within the SR 410 Sonoran Corridor study area:

- **Population and employment growth**—the current transportation network has limited ability to service new growth plans and provide access to existing and future activity centers.
- **Increased congestion by 2050**—portions of the transportation network within the study area are expected to operate at an unacceptable level of service (LOS) by 2050.

- **Insufficient system linkage**—lack of a high-speed, high-capacity linkage connection between I-19 and I-10 south of TUS inhibits mobility that is associated with regional, interstate, and international travel.

1.3.2 Population and Employment Growth

Based on transportation plans and proposed development in the study area, the existing and future roadway network is unable to effectively provide access to existing and future activity centers.

Projected population and employment growth within the study area will not be adequately serviced by the current transportation network. Population and employment estimates and projections for the study area and PAG region were obtained for 2019 and the target year of 2050 from Arizona Sun Cloud. The Arizona Sun Cloud Data Portal is a repository for transportation and socioeconomic datasets for the Sun Corridor region which includes Cochise, Maricopa, Pima, Pinal, and Santa Cruz counties provided by the metropolitan planning organizations. Current and projected population densities for the study area are shown on Figure 1-3. Likewise, current and projected employment densities for the study area are shown on Figure 1-4. These increases in population and employment density will manifest themselves in a number of activity centers in the study area which will place growing demand on the currently limited transportation system. Because the Sonoran Corridor study area is one of the few sectors of the Tucson metropolitan area that can readily accommodate significant employment growth, infrastructure improvements are essential to any proposed economic expansion. The Tier 1 EIS documented and this study confirmed the Sonoran Corridor would serve as the backbone of a future transportation network that would link growth and activity centers to local, regional and international markets and support access to jobs and the residential development that would occur to house the resulting additional population (Figures 1-5 & 1-6).

Figure 1-3. Population Densities in the Tucson Metropolitan Region, 2019 and 2050

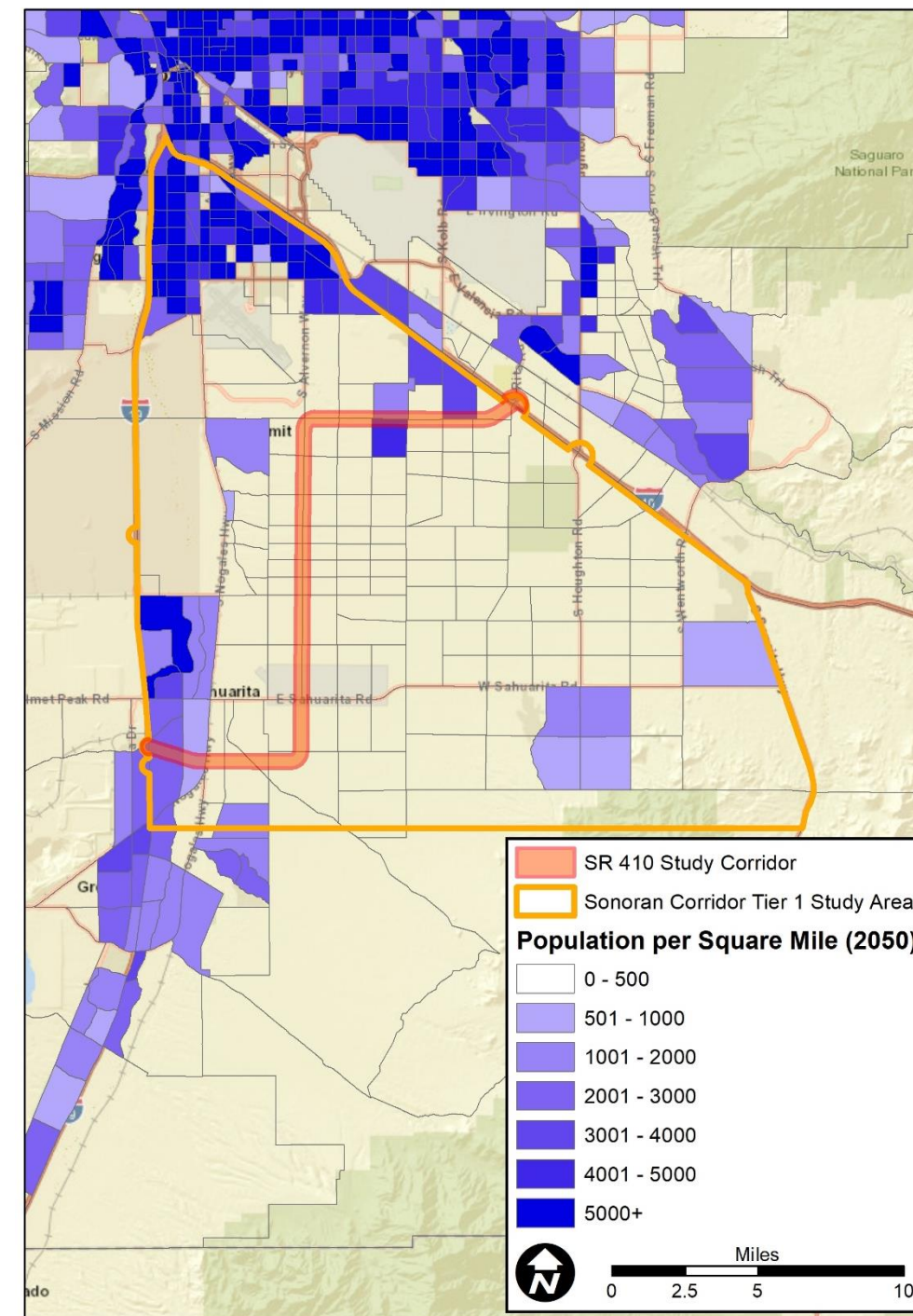
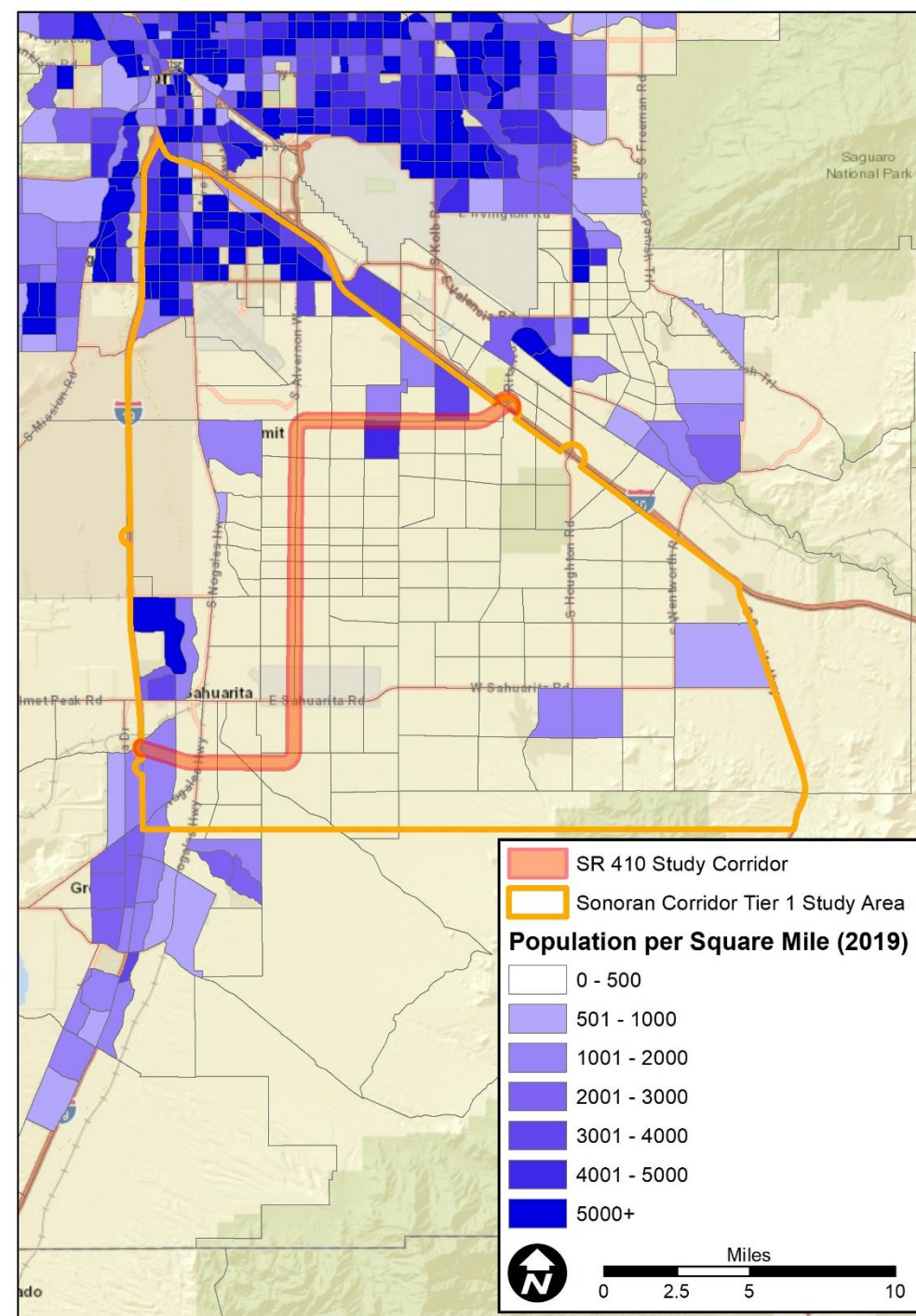


Figure 1-5. Activity Centers Accessibility Need in the Sonoran Corridor Study Area

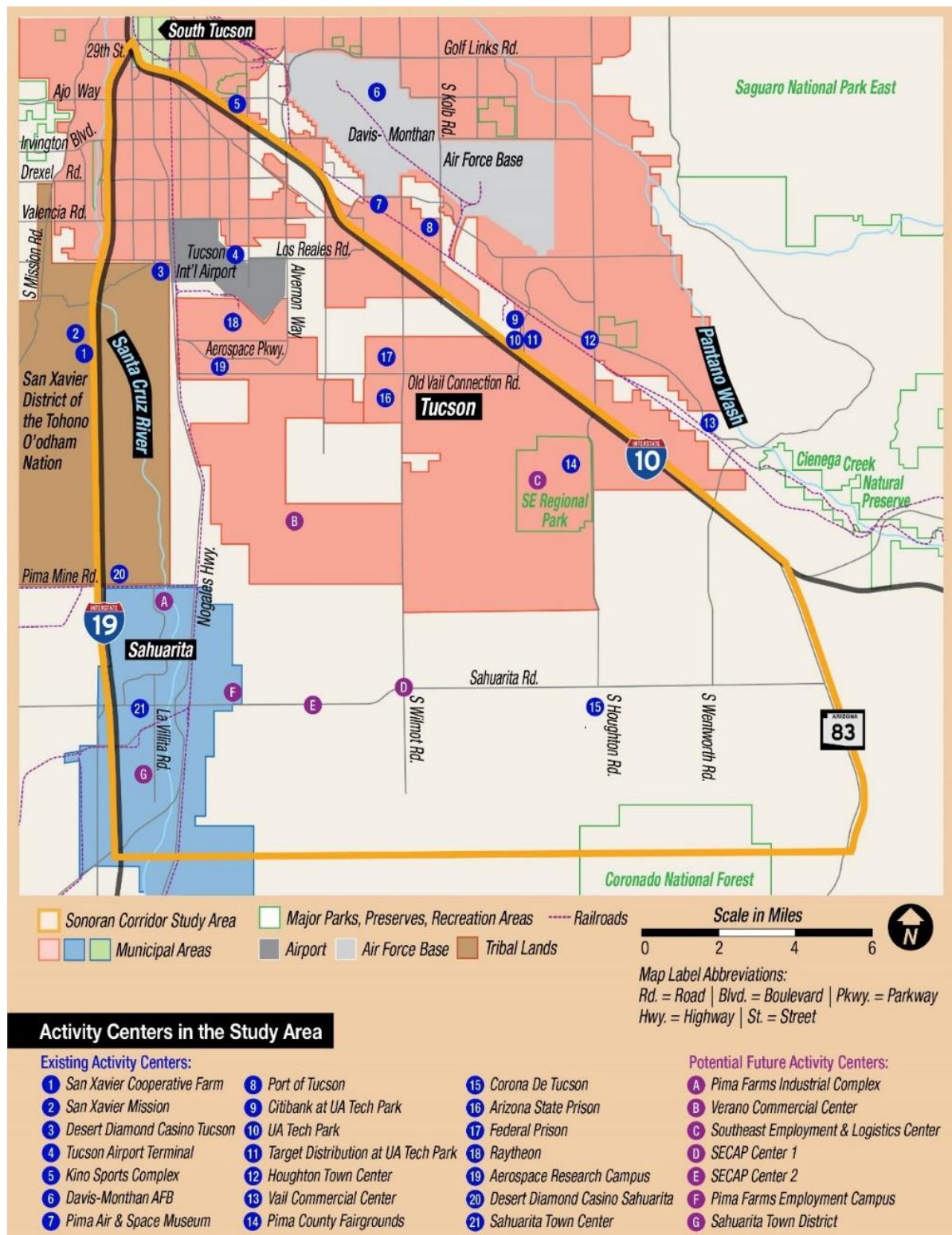


Figure from Tier 1 EIS and confirmed as part of this study

Figure 1-6. Major Employment Centers in the Sonoran Corridor Study Area



Figure from Tier 1 EIS and confirmed as part of this study

The area served by I-19 near Sahuarita also has limited travel options in and out of the area and would benefit from improved access to existing and emerging markets. With anticipated growth projected at 27 percent by 2050, the current and planned transportation network provides limited access to the planned growth areas. The Sahuarita East Conceptual Area Plan (SECAP) is one of these growth areas identified in Sahuarita's General Plan. SECAP outlines possible land uses for 30,190 acres east of Sahuarita's current boundaries and includes an estimated build-out of 53,600 dwelling units and up to 134,000 people as well as 5,000 acres for businesses that could be part of a high-tech corridor, another 1,200 acres for commercial business and 1,100 acres for open space and parks.

Table 1-1 shows the population growth anticipated in the PAG region and study area, while Table 1-2 shows employment growth in these areas based on PAG 2050 projections (Sun Cloud, 2025). The PAG region is forecasted to have growth in both population and employment—an additional 222,000 people and 132,000 jobs (Sun Cloud, 2025). Per Pima County's Comprehensive Plan Update, growth is projected within and surrounding the study area, as shown on Figure 1-3 and Figure 1-4. This growth is incorporated into the Sonoran Corridor Study travel forecasting model.

Table 1-1. Population Growth in the PAG Region and Sonoran Corridor Study Area, 2019 to 2050

YEAR	REGIONAL POPULATION	INCREASE	%	STUDY AREA POPULATION	INCREASE	%
2019	1,022,852			144,539		
2050	1,245,373	222,521	22%	182,973	38,435	27%

Table 1-2. Employment Growth in the PAG Region and Sonoran Corridor Study Area, 2019 to 2050

YEAR	REGIONAL EMPLOYMENT	INCREASE	%	Tier 1 STUDY AREA EMPLOYMENT	INCREASE	%
2019	393,470			52,690		
2050	525,827	132,357	34%	76,861	24,171	46%

The SR410 Sonoran Corridor region is also a growing corridor of technology for the region and the state, with several high-tech industries already in the corridor. The Aerospace Research Campus at TUS and the University of Arizona (UA) Technology Park (UA Tech Park), two critical employment centers within the study area and the region, are home to many high-value, high-tech jobs that share facilities and resources (Figure 1-6). The Aerospace Research Campus and the UA Tech Park currently employ over 16,000 workers in military and high-tech jobs. Land use and traffic modeling conducted during the Tier 1 EIS, along with information from PAG's Regional Mobility and Accessibility Plan (RMAP) 2045, projected growth in the Aerospace Parkway area immediately south of TUS and in the UA Tech Park along I-10 in related high-tech industries would include 49,000 jobs by 2045. Figure 1-5 shows existing and future study area activity centers identified in the Tier 1 EIS and confirmed as part of this study that will be affected by future travel conditions and a limited transportation network.

In addition, TUS is a major activity center that serves the Southern Arizona region, with an estimated 3.8 million passengers served in 2024 (MAP, 2024). The airport system supports nearly 46,000 jobs and contributes to more than \$8.3 billion in economic activity. The total number of aircraft operations at TUS in 2024 was 121,782 and is expected to increase to 159,945 in 2050 (FAA, 2025). In the TAA Strategic Plan 2.1 is planning to develop over 5000 acres of non-aeronautical land to the market to support the long-term sustainability and regional economic development. (TAA, 2022). These areas are further described in the 2021 TAA Commercial and Industrial Business Implementation Plan.

1.3.3 Increased Congestion by 2050

Traffic congestion is expected to worsen by 2050 due to increased travel demand and be a detriment to the existing environment within the study area. Traffic congestion can be quantified in terms of LOS. LOS is graded using six letters, A through F, with LOS A being the best and LOS F being the worst (Figure 1-7). The LOS of a roadway segment is a quantitative measure used to evaluate traffic congestion and delays. LOS is a measure of vehicle delay and a function of traffic volumes, traffic composition, roadway geometry, and the traffic controls at intersections.

Currently within the study area, the only options for connecting to I-10 from I-19 that avoid travel through downtown Tucson are Valencia Road (which has interchanges on both I-19 and I-10) or Sahuarita Road which connects to SR83 and subsequently I-10. The 2019 LOS on the existing roadway network is depicted on Figure 1-8. Even with the transportation improvements included in PAG's RMAP, LOS on I-10 and some arterial roadways in the study area will deteriorate (Figure 1-8).

1.3.4 Insufficient System Linkage

The designation of the Sonoran Corridor as a high-priority corridor in the FAST Act indicates a need to evaluate the possibility of a new transportation link connecting I-19 and I-10 south of TUS. As stated in the Arizona State Freight Plan (ADOT, 2022), the Sonoran Corridor study area is located between two major freight corridors in the state, I-19 and I-10. By providing another high-capacity access-controlled transportation facility connection link between I-19 and I-10, regional, interstate, and international mobility will be improved.

The 2014 Tucson International Airport Master Plan Update (TAA, 2014) and the Tier 1 EIS identified future airport expansion and other long-term plans such as identifying a connection between the recently constructed Aerospace Parkway area and a proposed future I-10 access to the north on either South Country Club Road or Alvernon Way (Figure 1-9). Although travelers will have improved access to the north, those travelers trying to access TUS from the south would not experience that same benefit. A future Sonoran Corridor would complement TUS and its surrounding area by providing service to the south.

Passenger and commercial freight movement coming from Mexico and points south of Tucson headed to destinations east of Tucson need to travel north on I-19 to the existing I-19/I-10 TI to stay on access-controlled facilities, adding as many as 10 miles to the trip to continue east on I-10 compared to a more direct route across the study area between I-19 and I-10.

Figure 1-7. Levels of Service (LOS)

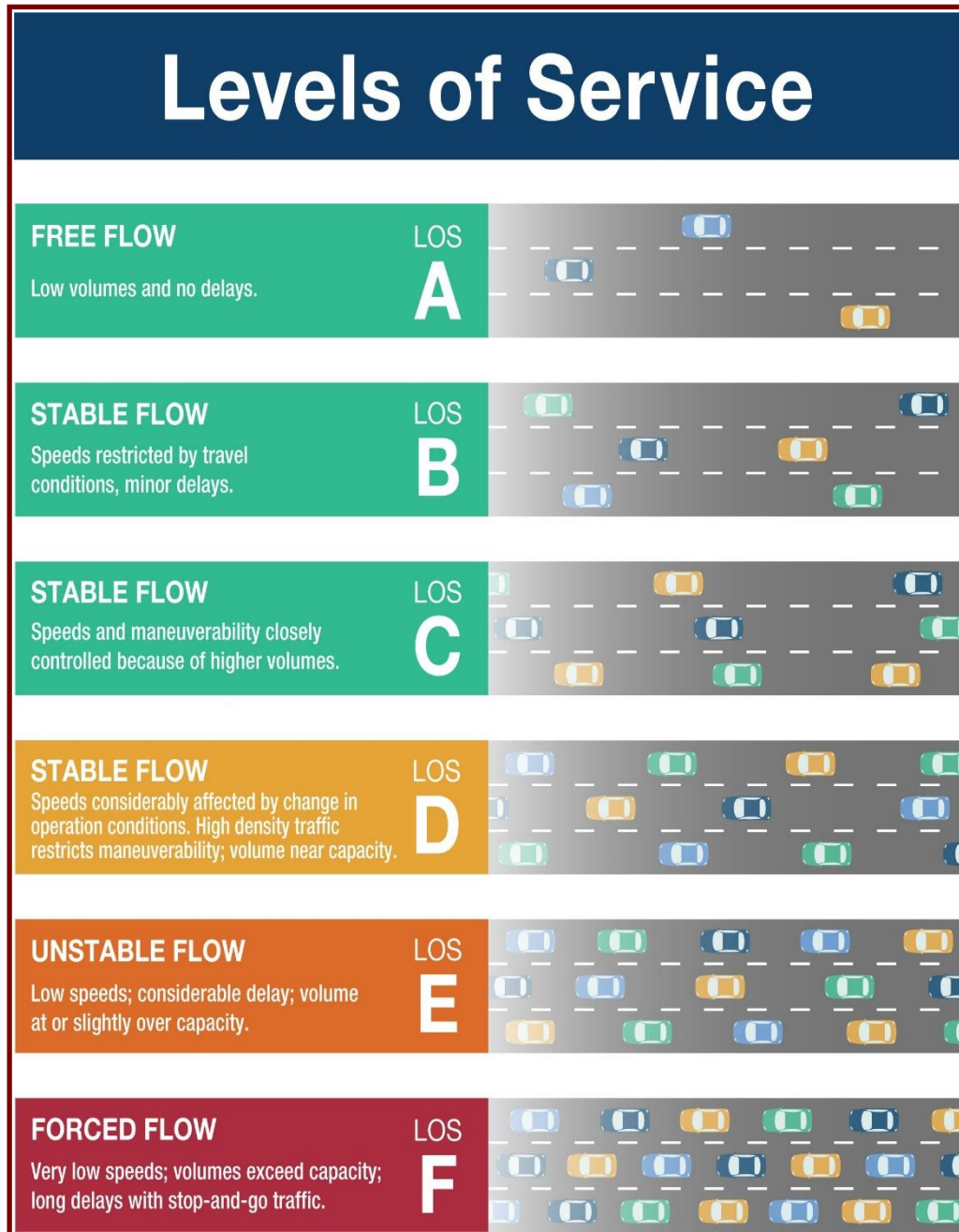


Figure 1-8. 2019 and 2050 Levels of Service on Study Area Roadway Network Based on PAG's RMAP

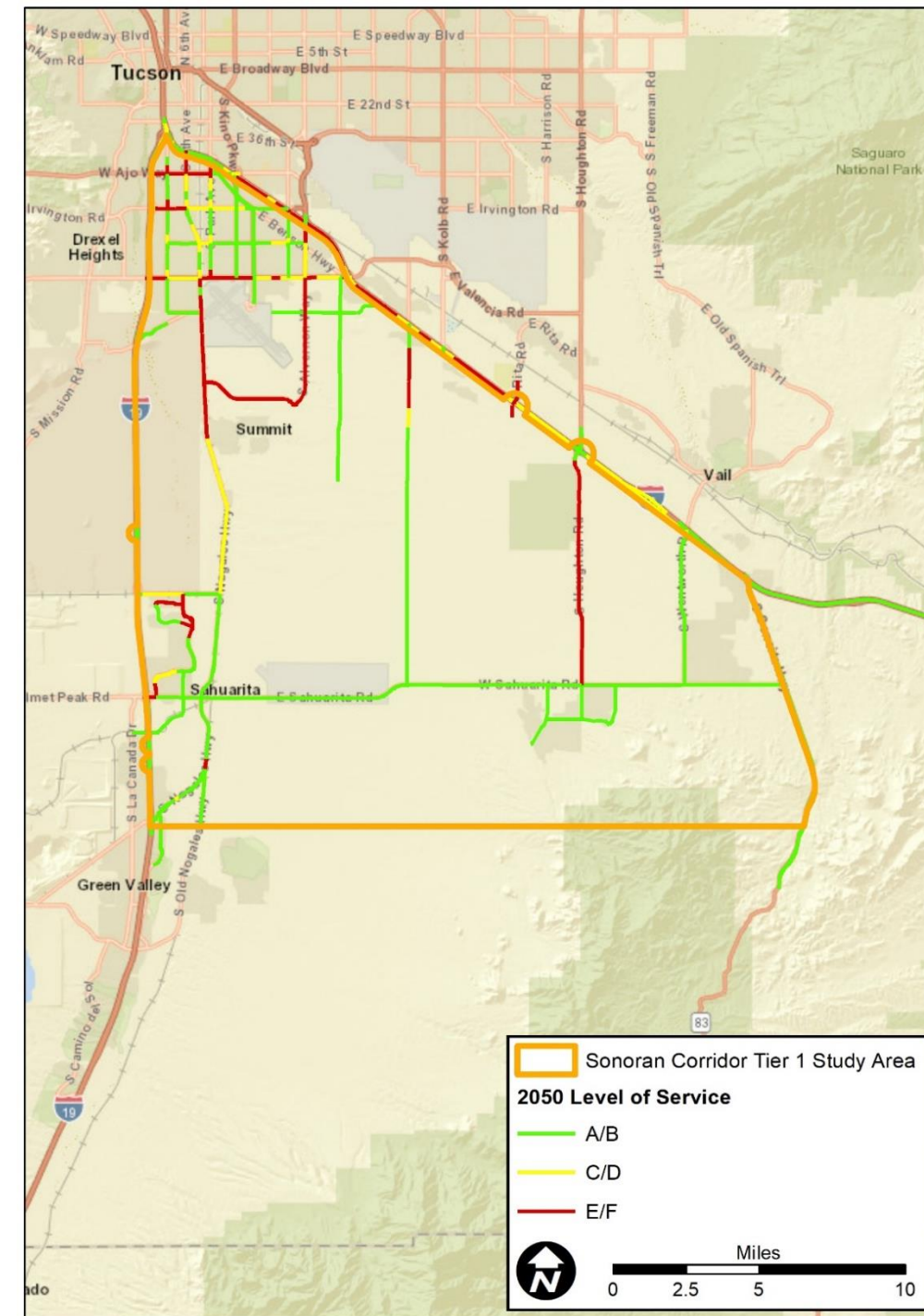
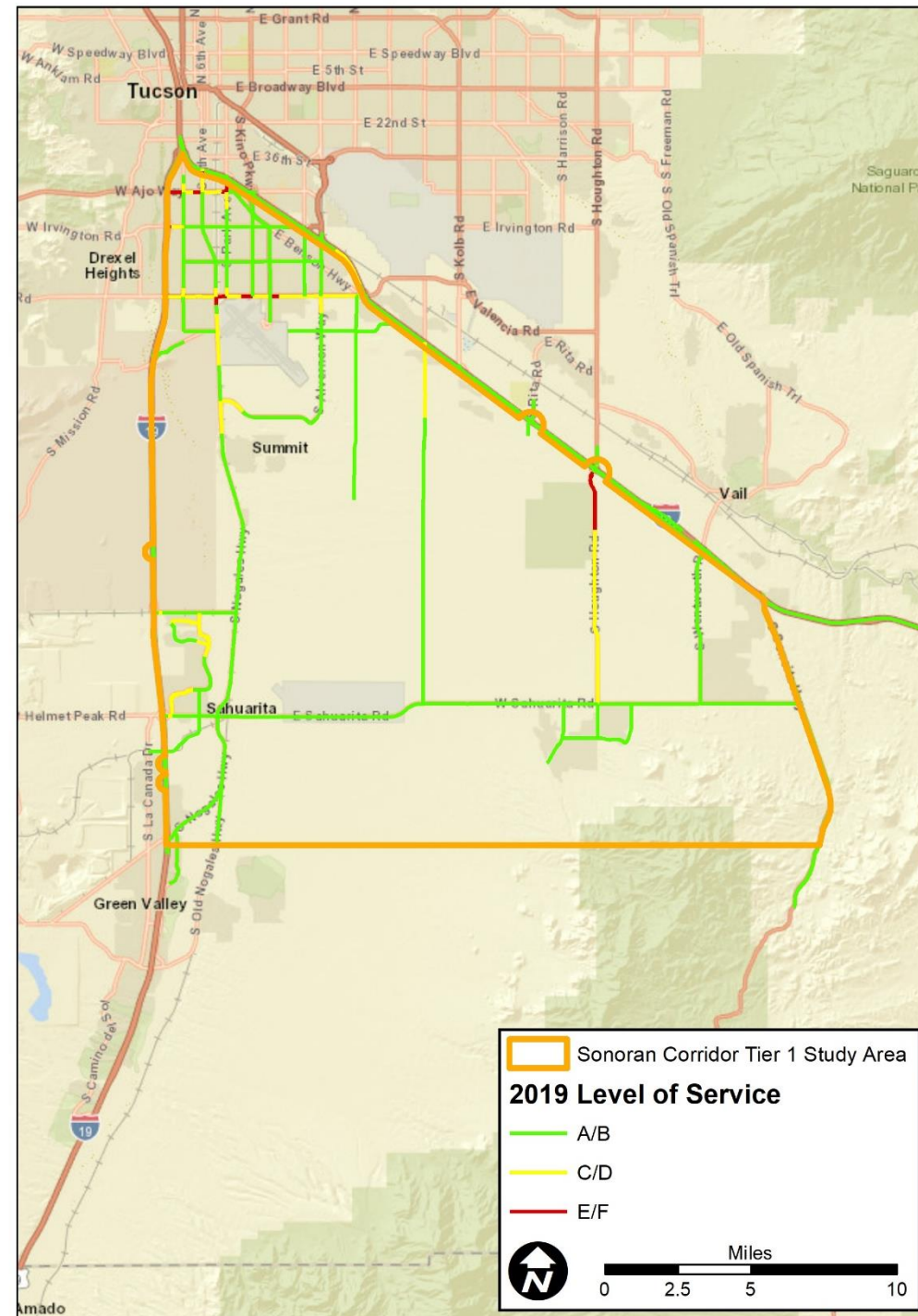


Figure 1-9. Proposed Future I-10 Airport Access Routes

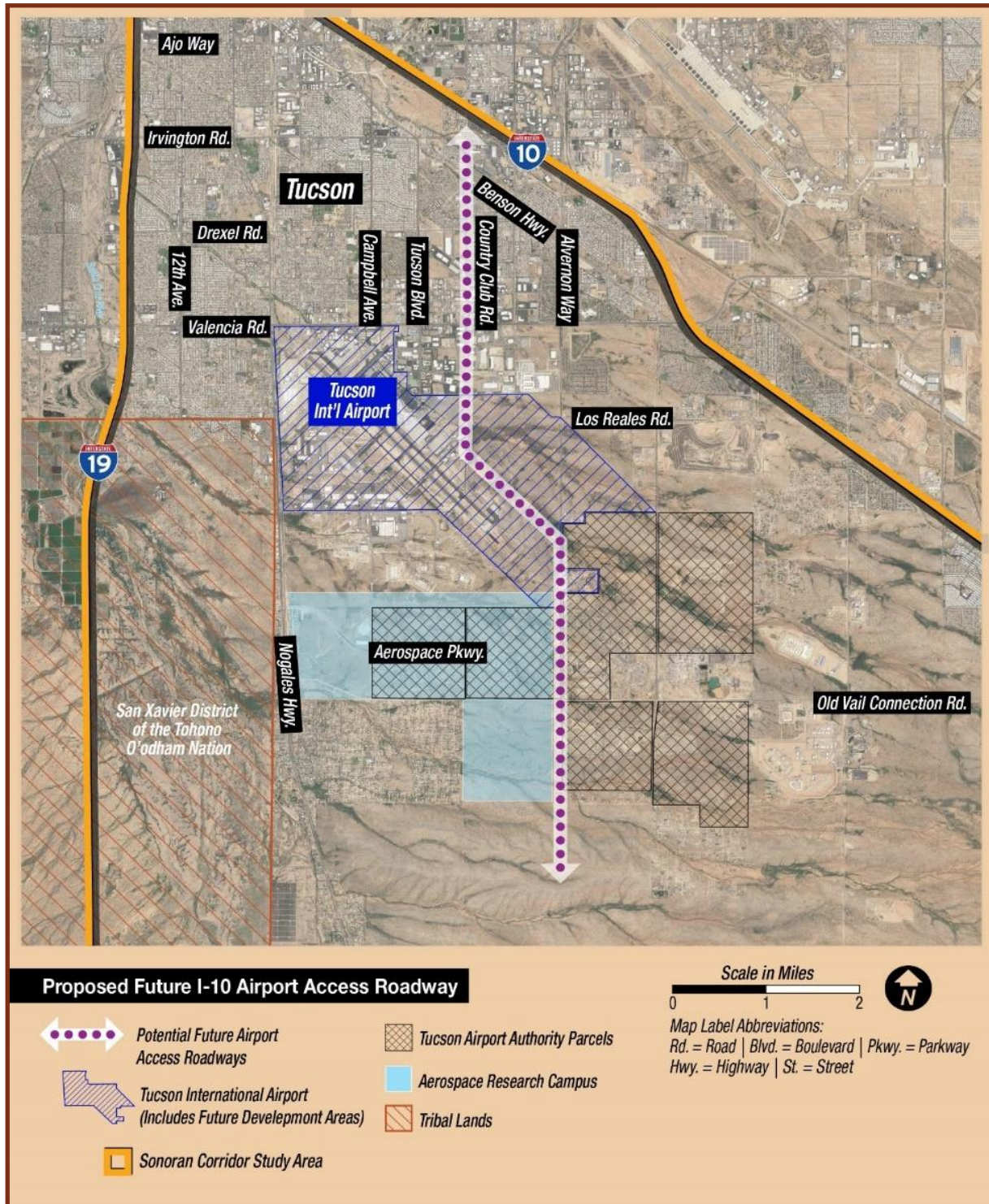


Figure from Tier 1 EIS and confirmed as part of this study

The Nogales-Mariposa Land Port of Entry (LPOE) is Arizona's most important LPOE and a major economic engine for the state. Nogales-Mariposa has the highest usage of any of the border crossings in Arizona with truck crossings in 2019 of 349,377 (ADOT State Freight Plan 2022). The current traffic in the port surpasses the 2025 projected number of 338,468 commercial vehicles expected by 2025, when it was reconstructed in 2014 (GSA, 2007). Forecasts of freight traffic into Arizona by truck are expected to nearly double between 2019 (284,937 tons) and 2045 (450,995 tons) (ADOT, 2022). With many of these trucks entering through the Nogales-Mariposa LPOE, traffic on both I-19 and I-10 is expected to increase as well. As commodities flow to and from Mexico grow over the years and truck traffic increases accordingly, regional, interstate, and international mobility without the Sonoran Corridor would be inhibited.

Previous planning efforts and input provided by the public during the Tier 1 EIS process indicated that traffic, particularly freight trucks from Nogales, heading to points east of Tucson often use routes other than I-19 to avoid added distance and congestion near downtown Tucson. As identified in the Tier 1 EIS and confirmed in this study, Figure 1-10 depicts freight trucks often travel on local roads that were not built to handle heavy truck traffic rather than use I-19 and I-10 because of the significant out-of-direction travel required to use the Interstate system. This causes these local roads to deteriorate faster and has implications for safety and for maintenance frequency and cost. For example, 30 percent of the east-bound or originating trucks to and from Nogales avoid traveling through Tucson altogether and use SR 82 and SR 83/SR 90 to access I-10, reducing the total distance travelled by 52 miles compared to traveling north to the I-19/I-10 TI. Although SR 82 is located outside the study area, it is regularly used by freight trucks to avoid travel through Tucson. SR 82 is a two-lane rural highway that travels through small residential communities, such as Patagonia and Sonoita. The use of SR 82, as well as SR 83, for commercial freight to and from Mexico is undesirable because of the character of the roads (SR 82 and SR 83 are designated scenic routes) and the small communities through which they travel. Furthermore, 18 percent of eastbound trucks were found to exit I-19 at Sahuarita Road or other local roads to travel 22 miles east to access I-10 from SR 83 rather than travel 37 miles to reach the same point by taking I-19 to I-10.

Although freight trucks may save on distance by using local roads as opposed to traveling on existing freight corridors, these roads typically have only one travel lane in each direction and offer limited passing opportunities, potentially creating safety concerns. Moreover, the lower speed limits on these local roads preclude any opportunity for significant travel time savings. The exposure to urban congestion and local traffic controls along these routes, such as traffic signals, also generates more air pollution emissions that can worsen ambient environmental conditions in those areas. As commodity flows to and from Mexico grow over the years and truck traffic increases accordingly (as much as 40 percent by 2045), regional, interstate, and international mobility without the Sonoran Corridor would be inhibited.

1.3.5 Conclusion

A review of updated information including population and employment projections, planning documents, and traffic information confirms that the needs previously identified still exist and the need for a transportation corridor is still valid.

Figure 1-10. Distribution of Truck Trips from Nogales to I-10

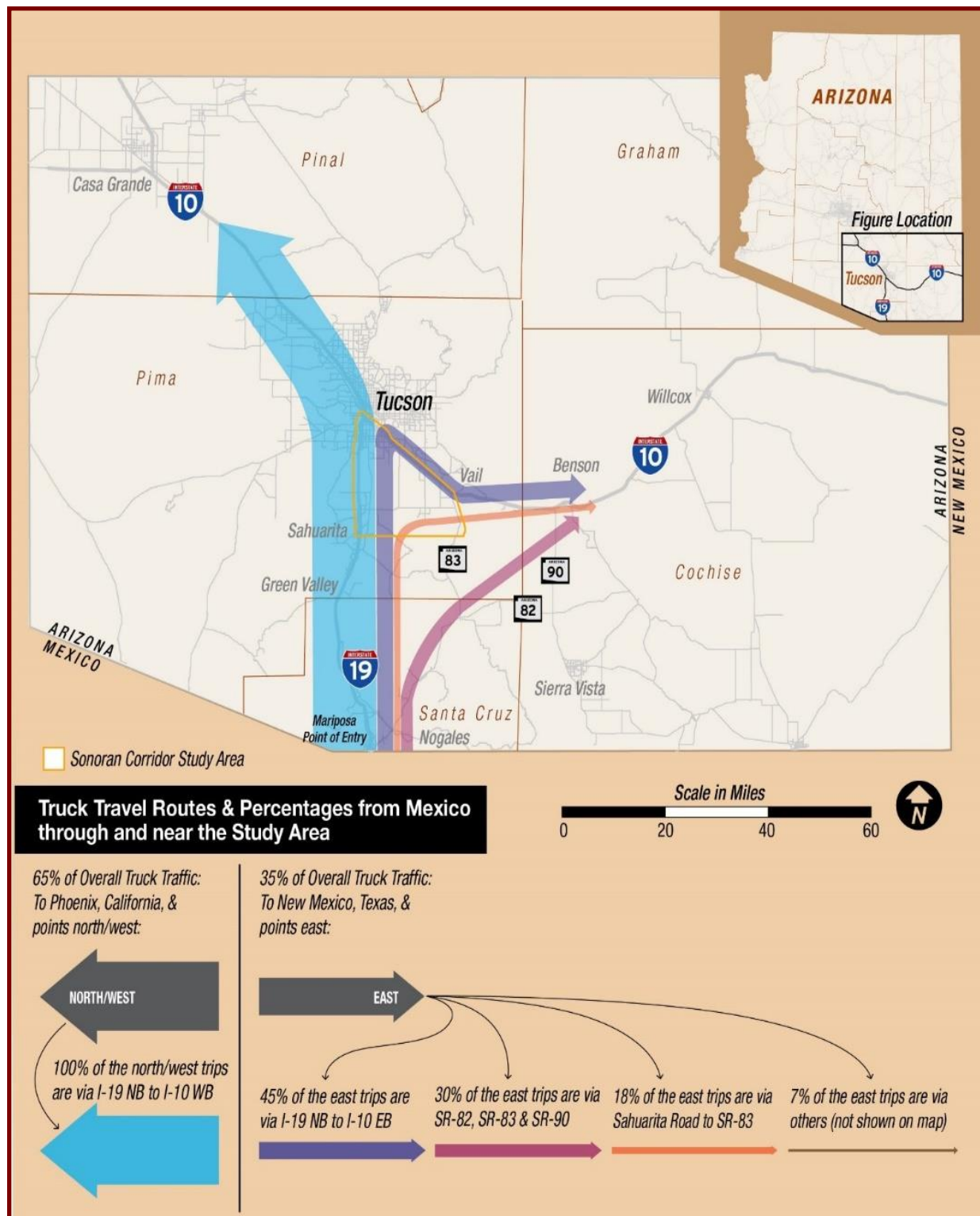


Figure from Tier 1 EIS and confirmed as part of this study

1.4 Purpose of Proposed Transportation Facility

Given the needs or problems that exist within the study area, the overall purpose of this study is to identify a high-priority, high-capacity, access-controlled transportation corridor that will:

- Improve the existing transportation network by providing better access to growth areas and activity centers;
- Reduce congestion and improve LOS that is predicted for the study area in 2050;
- Provide a system linkage between I-19 and I-10 south of TUS that improves mobility associated with regional, interstate, and international travel
- Identify a primarily 400-foot-wide alignment that would provide the right-of-way footprint of the ultimate SR410 Sonoran Corridor facility

The objective of providing a high-priority, high-capacity, access-controlled facility is consistent with federal legislation, including the 1995 National Highway System Designation Act (P.L. 104-59), Section 103 of the 2012 Moving Ahead for Progress in the 21st Century Act (or MAP-21, P.L. 112-141), and the FAST Act, a 5-year legislation plan to improve the nation's surface transportation infrastructure that was approved by the US Congress in December 2015. The FAST Act formally designated the Sonoran Corridor as a future Interstate freeway in Southern Arizona. This memorandum documents that the Tier 1 EIS purpose and need remains valid for this Tier 2 process considering changes in study area and updated projections.

1.5 Other Benefits or Desirable Outcomes

While not part of the fundamental purpose for the proposed Sonoran Corridor, several other desirable outcomes warrant consideration.

1.5.1 Conformance with Local, Regional, and State Plans

The proposed project will adhere to and support the guidance provided by local planning documents and regulations designed to manage regional and municipal growth. The project will ensure that transportation facilities developed as a consequence of this study conform to the requirements of such local and regional plans. The proposed project will aid in implementing local objectives and become part of the local plans as well as the regional Transportation Improvement Program and State Transportation Improvement Program to ensure consistency in transportation planning decisions. As local jurisdictions update local planning documents and regulations designed to manage regional and municipal growth, this study will provide information needed by these agencies to incorporate the Sonoran Corridor into these plans. This study will allow land-use decisions to accommodate the future transportation facility by preserving ROW as these areas experience growth and development.

1.5.2 Protection of Environmental Resources

Any new transportation infrastructure introduced to the study area would be planned to be compatible with local and regional transportation and general plans and to avoid or minimize adverse impacts to the natural, built, and social environments, in compliance with NEPA and the numerous regulations, executive orders, and policies adopted to ensure the consideration of specific environmental resources.

1.5.3 Limit Freight Traffic on Low-Volume Routes

By providing a more convenient route for major trucking operations, the Sonoran Corridor would encourage truck traffic to stay off smaller roads (e.g., SR 82 and SR 83) to and from Mexico that are currently being used to avoid congestion and out-of-direction travel into downtown Tucson. The redirection of truck traffic would also benefit the small communities along SR 82 that are heavily dependent on the main roadway for access and transportation.

1.5.4 Opportunity for Multimodal and Utility Use

A new Sonoran Corridor in the study area would necessitate the creation of a continuous linear right-of-way for the highway facility that might also be able to accommodate other infrastructure. Tucson Electric Power has already identified some utility corridors to support planned growth in the Sonoran Corridor study area. Combining development of such linear infrastructure with a transportation facility would provide the potential for economies of scale related to costs for right-of-way (ROW) and, depending on the timing, construction.

The same would be true for a rail line connecting the Nogales Branch of the UPRR with the Port of Tucson along the UPRR Sunset Route. Local agencies have been coordinating concepts that consider multimodal opportunities in the Sonoran Corridor study area.

Because it would be constructed as a new facility and not an improvement project, the Sonoran Corridor could incorporate newer technologies available at the time of construction. Some of the high-tech companies already located in or near the corridor are playing a part in the development of autonomous and connected vehicles. UA is also a participant in the latest automated transportation science. A transportation facility within the Sonoran Corridor study area would offer the chance to both test and, ultimately, demonstrate the performance of these systems for broader application around the state and the country.

1.6 References

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