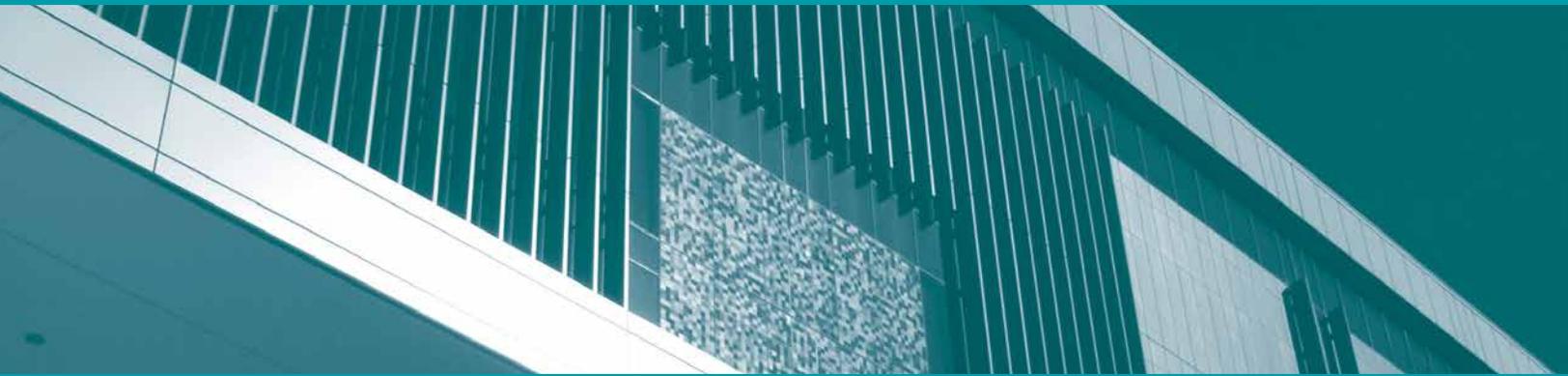


Chapter 2

Regional Infrastructure Investment for Job Creation



Chapter

2

Efficient and effective transportation systems are key drivers of economic development. Products, goods and services all have a transportation cost component embedded in their final cost. Transportation systems that promote efficiency and the rapid movement of goods and services will produce positive economic expansion both locally and regionally. A number of projects are under consideration or development, and these are discussed in this chapter.

A. Transportation.

1. Surface.

a. Interstate 11

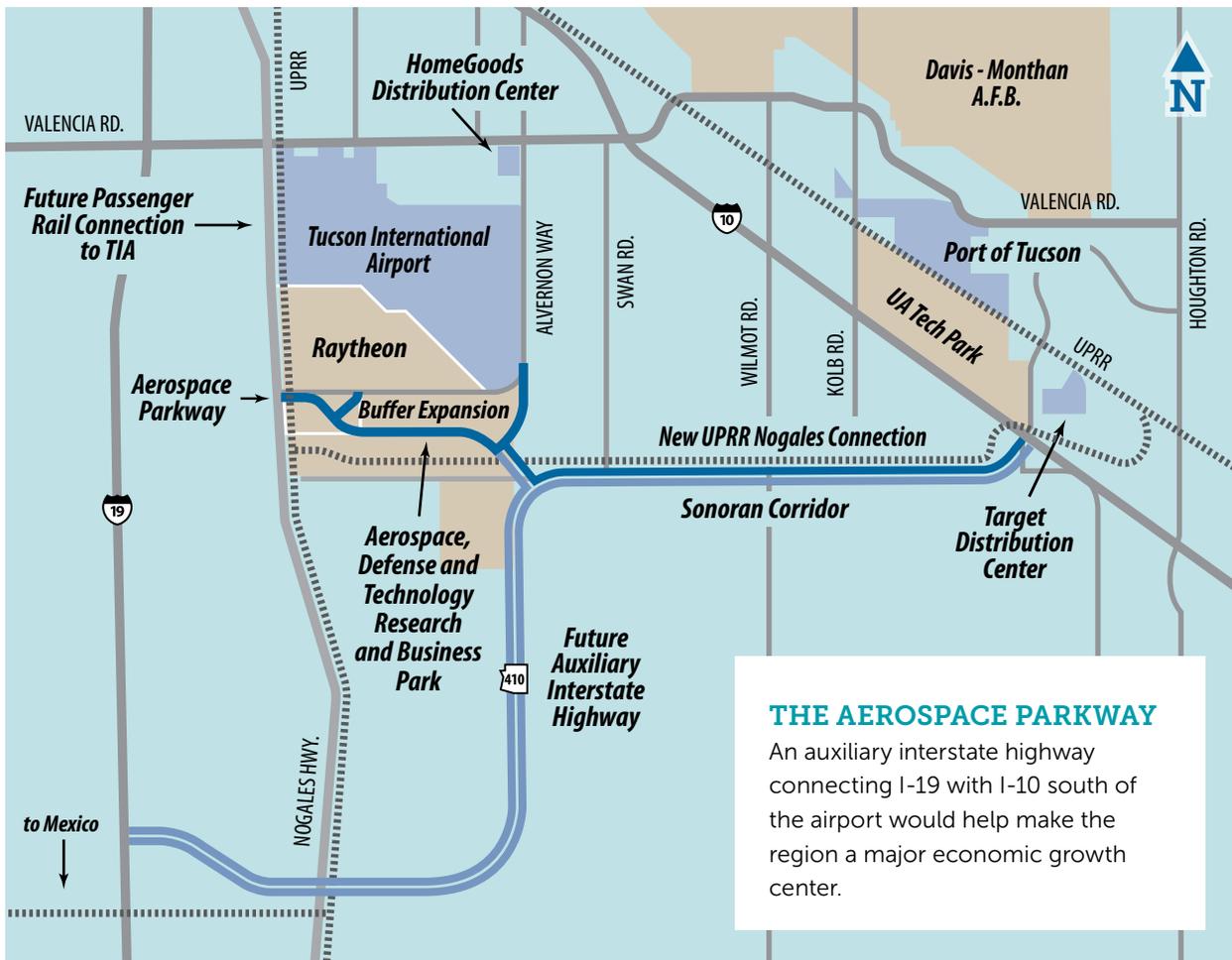
Arizona has four east/west interstate highways and no interstate that is a continuous north/south route that penetrates the southern or northern border of Arizona. The development

of Interstate 11 (I-11) as a trade corridor is underway and is being thoroughly documented in a joint effort by the Arizona Department of Transportation (ADOT) and the Nevada Department of Transportation. This corridor must pass through metropolitan or eastern Pima County and connect to the Mariposa Port of Entry (POE) at Nogales, which has already received more than \$250 million of investment by the federal government to improve its efficiency as a border crossing facility.

ADOT obtained funding for environmental and location studies for I-11, and those studies began in mid-2015. The studies need to be followed closely to ensure I-11 is extended through eastern Pima County and connects to the Mariposa POE. In addition to the Mariposa POE investment, the Mike O'Callaghan – Pat Tillman Memorial Bridge over Hoover Dam is another \$250 million federal investment in this



Pima County is poised to capitalize on planned expansions and construction of new Interstate Highway systems. New transportation infrastructure will help the County develop as a manufacturing, shipping and logistics hub.



international trade corridor. This commerce corridor should be closely monitored to ensure the benefits from Mexico are realized in the first implementation of corridor improvements, not the last, as now planned.

Both sides of the border recognize the importance of key commerce corridors in expanding trade between our countries. Mexico has committed, and is currently spending, \$1 billion on Mexico Highway 15 (M-15) from Sinaloa to Nogales. During a June 2015 trip to Mexico to promote trade and cross border relations, one of the four international cooperation agreements to be signed by Governor Doug Ducey and the Mexican Secretary of Foreign Affairs Jose Antonio Meade extends I-11 from Nogales into Mexico to Hermosillo and Mexico City following the M-15 route. These actions recognize the need to improve the flow of trade between our commerce centers. Pima County

is in an ideal location to benefit from this trade as this corridor matures.

b. Auxiliary Interstate Highway; Interstate 10 to Interstate 19

A rapid surface interstate connection between Interstate 19 (I-19) and Interstate 10 (I-10) south of the metropolitan Tucson area would be significantly beneficial to both facilitate trade with Mexico, particularly trucking that desires an eastern terminus beyond Arizona's border, and as a high-speed surface transportation facility within the metropolitan area; linking existing, growing and developing primary employment and residential centers. The County has been leading efforts to locate the route and begin the initial planning necessary for its future development.

The Auxiliary Interstate Highway connection from I-19 to I-10 is perhaps the most important

economic development surface transportation improvement in the region. This connection has been embraced by the Pima Association of Governments (PAG) and local partners as the most important transportation improvement that will facilitate job growth in the existing and growing manufacturing, technology, logistics and defense corridor in metropolitan Pima County. To that end, the PAG Regional Council has provided the funding for a three-year ADOT/Federal Highway Administration Environmental Impact Study that will commence in the last quarter of 2016.

In June 2015, Senators John McCain and Jeff Flake and Congresswoman Martha McSally cosponsored successful legislation to designate the Sonoran Corridor as part of the interstate highway system. This legislation was cosponsored by the entire Arizona Congressional Delegation and received Arizona Governor Doug Ducey's support, as well as that of local business leaders.

c. State Route 189 – Mariposa Port of Entry to Interstate 19

Perhaps the weakest link in our trade corridor with Mexico is State Route (SR) 189. The County has long advocated to the State Transportation Board that SR 189's improvement is essential to maximize the efficient use of the Mariposa POE. The County continues to advocate with ADOT and the Governor for these transportation improvements to be advanced ahead of all others in the State to maximize trade and economic expansion benefits with Mexico. The 2016 Legislature committed \$25 million toward advancing this project, and the State Transportation Board approved moving the first phase of the project from Fiscal Year 2021 to Fiscal Year 2019 with a commitment to work with the private sector and find other additional funding sources to incorporate both phases into one project, which should result in a savings of at least \$15 million.



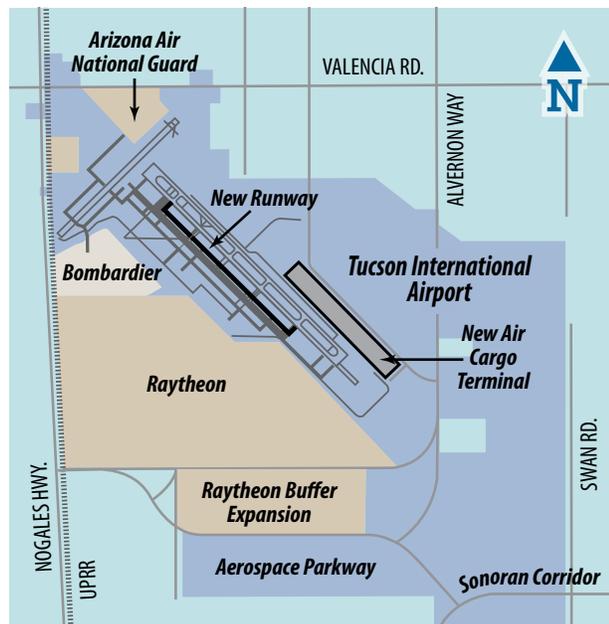
Realignment of Hughes Access Road to create Aerospace Parkway had the support of local, state and federal officials. Pictured here are Tucson City Councilwoman Shirley Scott, Pima County Supervisor Sharon Bronson, Supervisor Ramón Valadez, Raytheon President Taylor Lawrence, U.S. Rep. Martha McSally, Ariz. Rep. David Gowan, Supervisor Ray Carroll and County Administrator Chuck Huckelberry.



Realignment of Hughes Access Road to create Aerospace Parkway provided an expansion buffer zone for Raytheon. The project also laid the foundation for growth in defense, aerospace, manufacturing and logistics focused industries.

d. Aerospace Parkway

The relocation of Hughes Access Road is a project completed by the County to allow Raytheon to achieve the full benefits of both an existing and expanded buffer. Hughes Access Road, a public highway that carries thousands of vehicles per day, posed a significant impediment to Raytheon production expansion. The Hughes Access Road relocation to a new roadway alignment named the Aerospace Parkway significantly increased buffering benefits to Raytheon, as well as added to accessibility of the emerging business and research park for job growth and development south of Raytheon. The Aerospace Parkway was completed on December 1, 2015. This project was a nearly \$14 million investment by the region to not only protect the region's largest employer, but lay the groundwork for future aerospace, manufacturing and defense-based primary employment in the region. The completion occurred concurrently with a commitment by the first tenant for the Business and Research Park, World View. With a second announced tenant in the Business Park and increased development in the region, traffic demand on the Parkway is growing rapidly, resulting in planned expansion through the Business Park to four lanes.



AIRPORT EXPANSION

The county's efforts to relocate Hughes Access Road open the door for major expansion of the airport, including a second runway.

The regional council of governments, Pima Association of Governments, on October 27, 2016 authorized an amendment to the current five-year Transportation Improvement Plan to

widen and expand the Aerospace Parkway from Old Nogales Highway easterly, including expansion and improvement of the south access to Raytheon and local public highway service to tenants now beginning to locate in the Business Park. \$10 million of additional transportation investment was approved for this purpose.

2. Air

a. Second Main Parallel Runway at Tucson International Airport

The Tucson Airport Authority (TAA) has recently completed a Master Plan update for Tucson International Airport (TIA). The Master Plan calls for relocating the existing general aviation runway and reconstructing it as a full-length commercial service runway. Such an infrastructure investment is vital to improving safety and reliability and to meet current Federal Aviation Administration (FAA) standards in order to better serve passenger air travel and air cargo and to continue to support the vital military Pilot Training Mission of the 162nd Fighter Wing of the Arizona Air National Guard (AZ ANG) located at TIA.

The County will continue to be a strong advocate for federal aviation funding to complete

this project at TIA. This second, full-service parallel runway is necessary to allow TIA to serve the aviation needs of southern Arizona in the safest and most efficient manner; whether it is for passenger, air cargo, military or general aviation. It is important this program be developed as soon as practically possible to complement and enhance the attractiveness of the Aerospace, Defense and Technology Business and Research Park to potential new businesses.

3. Rail

a. Rail/Truck Interface at the Port of Tucson

The Port of Tucson is a true operational international inland port. This site successfully initiated international cargo container shipping by rail with onsite Customs inspections. As the only intermodal facility on the Union Pacific rail line in Arizona, it has long supported rail/truck shipping at its facility that was recently significantly expanded with substantial, new, privately-funded 17,000-foot internal dual-rail infrastructure. With the County's sponsorship, the Port of Tucson was the recipient of a \$5 million Transportation Investment Generating Economic Recovery (TIGER) Grant to develop large train offloading with a new



With Pima County's sponsorship, the Port of Tucson received a \$5 million TIGER grant used to continue development of a large train offloading facility. The Port of Tucson today is an operational international inland port and intermodal facility.

8,000-foot rail siding and high-speed switch interconnecting the Union Pacific intercontinental line to the private rail infrastructure at the Port of Tucson. Recognizing the benefit of this facility and the value of adding the initial switch, Union Pacific Railroad funded the installation of a similar switch at the opposite end of the Port to increase capability. Both projects are now complete.

b. Nogales Line extension connecting with the Sunset Line south and east of the Port of Tucson.

The existing Nogales Line within Tucson has 18 at-grade crossings at public highways. These crossings carry a total of 304,025 vehicles per day; and as a result, Nogales rail traffic poses both a congestion and potential safety concern for mobility in the urban area. It has been proposed that the Nogales Line be rerouted adjacent to the Sonoran Corridor; which would allow the line to connect more efficiently with the Sunset Line and be grade separated, free from at-grade highway crossings. This will allow the existing Nogales Line from the south boundary of the Aerospace, Defense and Technology Research and Business Park to the downtown Toole Avenue connection to be available for use in the future for passenger rail development. The County and other jurisdictions continue to plan this relocation with Union Pacific Railroad.

B. Utilities

The County has commenced a wastewater/sewer outfall inceptor study to serve the entire region south of Raytheon. Extending public wastewater infrastructure is a key component of job expansion. Without public service of utilities such as wastewater, it is impossible for new job centers to be constructed in this location. It is likely that extending the existing sanitary interceptor sewer system to this area will cost approximately \$10 million; an investment the County is prepared to make to

facilitate basic employment growth within this existing and future job corridor. The County has also asked the City of Tucson, through Tucson Water, to join in this planning effort for the extension of the water utility system necessary to provide water service to these new employment centers. Other utilities, including Tucson Electric Power Company and the Western Area Power Authority, as well as Union Pacific, have cooperated in the master planning of this corridor to ensure appropriate separation and availability for all utilities throughout this region. Combined, the cost of these major utility extension investments will range from \$40 to \$50 million.

With their independent implementation, each infrastructure investment project will improve transportation systems, economic competitiveness and lead to economic expansion.

ACTION ITEMS

- 2.1 Pima County will fully cooperate with and participate in any environmental or location alternative studies for I-11 within Pima County and will closely monitor project implementation to ensure the trade benefits from a connection to Mexico are realized.
- 2.2 Establish as a County highway the auxiliary interstate highway connection between I-10 and I-19.
- 2.3 Continue to advocate for early and adequate funding for both phases to improve SR 189 from the Mariposa POE to I-19.
- 2.4 Support development of the second full-service parallel runway for TIA.
- 2.5 Initiate development of a regional utility corridor, including a sanitary sewer inceptor system, to serve the employment growth area south of TIA extending to Rita Road at I-10.
- 2.6 Support and cooperate with Union Pacific Railroad to reroute the Nogales Line and make available the existing Nogales Line for future passenger rail to TIA, Raytheon and the Business and Research Park.
- 2.7 Expand the road and utility infrastructure to accommodate new tenants in the Business and Research Park.