

1 **3.6 Economic Impacts**

2 **3.6.1 Summary of Draft Tier 1 EIS**

3 FHWA and ADOT used the Regional Economic Models, Inc. (REMI) TranSight model for the  
4 State of Arizona (ADOT 2017o) to analyze regional economic changes in demand, income, and  
5 employment as a result of the No Build and Build Corridor Alternatives. Changes in economic  
6 activity would be triggered by (1) capital investment expenditures during the development phase  
7 and (2) efficiencies gained from transportation improvements during the operational phase.  
8 **Table 3.6-1** summarizes the economic impact analysis results for the three Build Corridor  
9 Alternatives. The table shows the net change from the No Build Alternative (or baseline) for  
10 each of the three Build Corridor Alternatives.

11 **Table 3.6-1. Summary of Potential Economic Impacts**

Economic Impact	Purple Alternative	Green Alternative	Orange Alternative
<b>Development Phase (2020–2024)</b>			
Gross Regional Product (\$ Billions)	\$8.9	\$8.7	\$3.9
Personal Income (\$ Billions)	\$5.7	\$5.6	\$2.5
Employment (Thousands of Job-Years)	106.4	104.5	46.8
<b>Remainder of Analysis Period (2025–2044)</b>			
Gross Regional Product (\$ Billions)	\$3.7	\$2.9	\$1.8
Personal Income (\$ Billions)	\$5.4	\$4.4	\$2.3
Employment (Thousands of Job-Years)	31.8	25.9	15.4
<b>Total (2020–2044)</b>			
Gross Regional Product (\$ Billions)	\$12.7	\$11.7	\$5.7
Personal Income (\$ Billions)	\$11.1	\$10.0	\$4.8
Employment (Thousands of Job-Years)	138.2	130.4	62.3
<b>Employment Impact by County (2020–2044)</b>			
Yavapai County (Thousands of Job-Years)	4.0	3.7	1.8
Maricopa County (Thousands of Job-Years)	105.0	98.9	47.3
Pinal County (Thousands of Job-Years)	6.8	6.4	3.0
Pima County (Thousands of Job-Years)	21.7	20.7	9.8
Santa Cruz County (Thousands of Job-Years)	0.8	0.7	0.4

12 Source: ADOT 2017o

13 <sup>a</sup> The estimates show the difference between the Build Corridor Alternatives and the No Build Alternative. The current economic  
14 growth trends would be expected to continue under the No Build Alternative.

15  
16 Of the three Build Corridor Alternatives, the Purple Alternative would generate the largest  
17 increase to the gross regional product. The \$12.7 billion increase under the Purple Alternative  
18 would be more than double the impact of the Orange Alternative, primarily due to initial  
19 construction costs. This increase would be \$1.0 billion more than the impact of the Green

1 Alternative. Similarly, the Purple Alternative’s impact on personal income (\$11.1 billion) is  
2 expected to be more than twice the impact of the Orange Alternative and \$1.1 billion more than  
3 the impact under the Green Alternative. The Purple Alternative is estimated to generate  
4 138,200 job-years over the analysis period (2020 to 2024) compared to the Green Alternative at  
5 130,400 job-years and the Orange Alternative at 62,300 job-years.

6 The Build Corridor Alternatives may open access and facilitate more people visiting parks and  
7 other outdoor recreation destinations. Conversely, the Build Corridor Alternatives could deter  
8 park visits and economic contributions from outdoor enthusiasts by reducing the rural character  
9 of parks or diminishing the visitor experience. I-11 has the potential to provide better access and  
10 opportunities for gateway services, such as lodging, that enhance tourism. The Build Corridor  
11 Alternatives can help further the growth of outdoor tourism as an anchor of the local economy.

### 12 **3.6.2 Summary of Changes Since Draft Tier 1 EIS**

13 NPS requested that the economic benefit of Saguaro National Park be disclosed. NPS  
14 estimates that nearly one million people visited the West and East units of Saguaro National  
15 Park in 2017 and contributed \$88.7 million to the local economy (NPS 2018).

16 The City of Tucson expressed concerns about impacts on the City’s economy because the  
17 Recommended Alternative bypasses the City. The City was concerned that visitors who travel to  
18 or pass through Tucson to shop would be diverted away from the City. This concern, along with  
19 others, prompted FHWA and ADOT to include both the west option and east option in Pima  
20 County as part of the Preferred Alternative to be evaluated in further detail in Tier 2.

### 21 **3.6.3 No Build Alternative**

22 Under the No Build Alternative, the Project would not be built. Maricopa County is, and will  
23 remain, the largest economy in the Study Area. Its gross regional product is expected to  
24 increase from \$251.6 billion to \$419.9 billion, or 67 percent, the most of any county, over the  
25 analysis period. As a result, Maricopa County’s share of gross regional product for the Study  
26 Area would increase from 80 percent to 82 percent from 2020 to 2044. Employment also is  
27 projected to grow to nearly three million in Maricopa County (ADOT 2017o).

28 Baseline employment in the Study Area is estimated at 3.3 million in 2020 and is expected to  
29 increase by 12 percent from 2020 to 2044 to 3.7 million (or 0.48 percent per year on average).  
30 Overall, the Study Area’s economy is expected to add more than 400,000 jobs (ADOT 2017o).

### 31 **3.6.4 Recommended Alternative**

32 The Project Team anticipates the economic impacts for the Recommended Alternative would be  
33 similar to the economic impacts for the Purple Alternative and Green Alternative presented in  
34 **Section 3.6.4** (Environmental Consequences) of the Draft Tier 1 EIS. Construction costs for the  
35 Recommended Alternative would increase slightly compared to the Purple Alternative and  
36 Green Alternative (+3.7 percent and +5.6 percent), respectively (see **Chapter 6** [Recommended  
37 Alternative] of the Draft Tier 1 EIS). **Figure 3.6-1** shows existing and emerging employment  
38 clusters in relation to the Recommended and Preferred Alternatives.

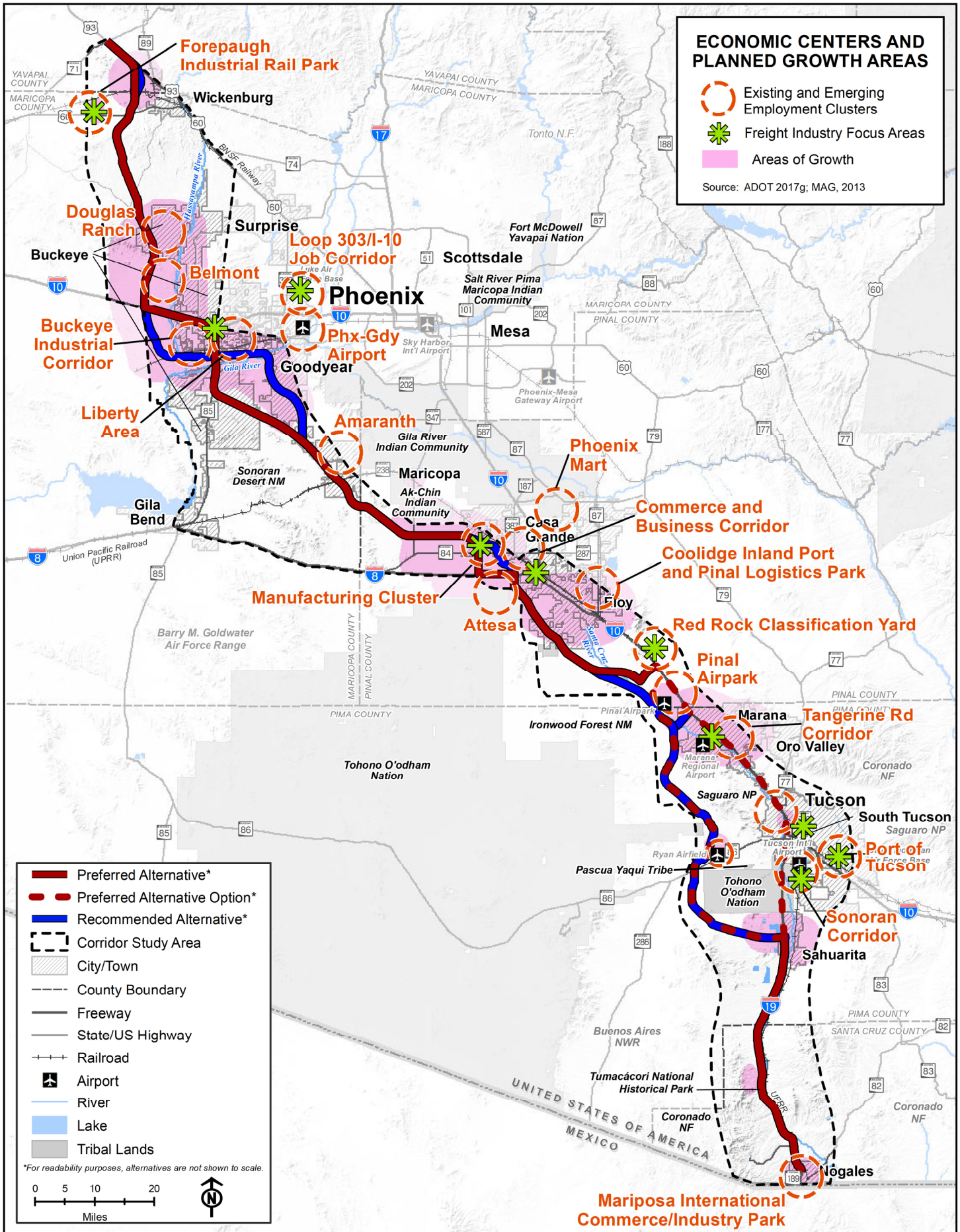


Figure 3.6-1. Updated Map of Key Economic Centers and Growth Areas in the I-11 Study Area





- 1 Anticipated economic impacts for the Recommended Alternative include:
- 2 • **Nogales to Sahuarita:** Two economic activity clusters include Mariposa International  
3 Commerce Park and the planned commercial and resort development near Tubac. The  
4 Recommended Alternative would continue to provide access to these two clusters.
  - 5 • **Sahuarita to Marana:** The Recommended Alternative would provide access to an emerging  
6 employment center near Ryan Airfield. However, it would not provide access to existing  
7 employment clusters of Port of Tucson, Sonoran Corridor, downtown Tucson, and the  
8 Tangerine Road Commercial Corridor in Marana.
  - 9 • **Marana to Casa Grande:** The Recommended Alternative would encompass a growth area  
10 that includes existing and emerging economic clusters of Pinal Airpark and the Red Rock  
11 Classification Yard. The proposed connector between the Recommended Alternative and  
12 I-10 would provide access to these existing and emerging employment clusters.
  - 13 • **Casa Grande to Buckeye:** A majority of this section of the Project corridor is identified as a  
14 growth area with 10 existing and emerging employment clusters as shown on **Figure 3.6-1**,  
15 starting with Coolidge Inland Port near Casa Grande to Liberty Area, and Buckeye Industrial  
16 Corridor, Phoenix-Goodyear Airport, and Loop 303/I-10 Job Corridor in the  
17 Buckeye/Goodyear area. The Recommended Alternative would pass through these  
18 employment clusters, positively impacting access and connectivity.
  - 19 • **Buckeye to Wickenburg:** The Recommended Alternative runs north from I-10 through  
20 Vulture Mine RMZ to Wickenburg. The Recommended Alternative would facilitate access  
21 through two emerging employment clusters, Belmont and Douglas Ranch, and one existing  
22 cluster, Forepaugh Industrial Rail Park.

23 **Table 3.6-2** summarizes and compares the economic impact analysis results for the  
24 Recommended and Preferred Alternatives. The table shows the net change from the No Build  
25 Alternative (or baseline) for each Build Corridor Alternative. Although ADOT's REMI TranSight  
26 model was not re-run, the Project Team derived multipliers for the development and operational  
27 phases in order to estimate the economic impacts. For the Recommended and Preferred  
28 Alternatives, the project team also estimated these impacts based on cost summary data (2017  
29 dollars).

30 The Recommended Alternative would generate the largest economic impacts. This increase  
31 would be \$0.5 billion and \$2.5 billion more than the gross regional impacts of the Preferred  
32 Alternative west and east options, respectively. The Recommended Alternative impact on  
33 personal income (\$10.3 billion) is expected to be slightly higher than the impact of the Preferred  
34 Alternative west option and \$1.8 billion more than the impact under the east option. The  
35 Recommended Alternative is estimated to generate 136,200 job-years over the analysis period  
36 (2020 to 2044) compared to the west option at 130,200 job-years and the east option at 106,700  
37 job-years.



1 **Table 3.6-2. Summary of Potential Impacts on Economic Indicators for the 2,000-**  
2 **foot-wide Corridors of the Recommended and Preferred Alternatives**

Metrics	Recommended Alternative	Preferred Alternative with West Option in Pima County	Preferred Alternative with East Option in Pima County
<b>Development Phase (2020–2024)</b>			
Gross Regional Product (\$ Billions)	\$9.2	\$8.6	\$6.9
Personal Income (\$ Billions)	\$5.9	\$5.5	\$4.4
Employment (Thousands of Job-Years)	110.4	102.9	82.5
<b>Remainder of Analysis Period (2025–2044)</b>			
Gross Regional Product (\$ Billions)	\$2.9	\$3.1	\$2.7
Personal Income (\$ Billions)	\$4.4	\$4.6	\$4.1
Employment (Thousands of Job-Years)	25.8	27.3	24.1
<b>Total (2020–2044)</b>			
Gross Regional Product (\$ Billions)	\$12.2	\$11.7	\$9.6
Personal Income (\$ Billions)	\$10.3	\$10.1	\$8.5
Employment (Thousands of Job-Years)	136.2	130.2	106.7
<b>Employment Impact by County (2020–2044)</b>			
Yavapai County (Thousands of Job-Years)	3.9	3.7	3.0
Maricopa County (Thousands of Job-Years)	103.3	98.8	81.0
Pinal County (Thousands of Job-Years)	6.6	6.4	5.2
Pima County (Thousands of Job-Years)	21.6	20.6	16.8
Santa Cruz County (Thousands of Job-Years)	0.8	0.7	0.6

3 Source: ADOT 2017o.

4 <sup>a</sup>The estimates show the difference between the Recommended/Preferred Alternative and the No Build Alternative. The current  
5 economic growth trends would be expected to continue under the No Build Alternative.

6 **3.6.5 Preferred Alternative**

7 Anticipated economic impacts for the Preferred Alternative include:

- 8 • **Nogales to Sahuarita:** The Preferred Alternative would continue to provide access to  
9 Mariposa International Commerce Park and the planned commercial and resort  
10 development near Tubac.
- 11 • **Sahuarita to Marana:** The Preferred Alternative with west option in Pima County would be a  
12 new corridor west of Tucson and would provide access to an emerging employment center  
13 near Ryan Airfield. However, it would not provide access to existing employment clusters of  
14 Port of Tucson, Sonoran Corridor, downtown Tucson, and the Tangerine Road Commercial  
15 Corridor in Marana. The Preferred Alternative with east option in Pima County would



- 1 continue to provide connectivity to these existing employment clusters. However, it would  
2 not provide access to an emerging employment center near Ryan Airfield.
- 3 • **Marana to Casa Grande:** The Preferred Alternative would serve the same existing and  
4 employment clusters as the Recommended Alternative.
- 5 • **Casa Grande to Buckeye:** The Preferred Alternative would serve most of the existing and  
6 emerging employment clusters as the Recommended Alternative; however, because it is  
7 farther south of the Recommended Alternative it would not provide direct access to the Loop  
8 303/I-10 Job Corridor and the Phoenix-Goodyear Airport.
- 9 • **Buckeye to Wickenburg:** The Preferred Alternative would serve the same existing and  
10 employment clusters as the Recommended Alternative.

### 11 3.6.6 Mitigation and Tier 2 Analysis

#### 12 3.6.6.1 Tier 2 Analysis Commitments

13 FHWA and ADOT completed an initial level of analysis in this Final Tier 1 EIS to identify a  
14 2,000-foot-wide preferred Build Corridor Alternative. Additional analysis in Tier 2 will inform  
15 (1) the selection of a specific alignment (approximately 400 feet wide) within the selected  
16 2,000-foot-wide corridor and (2) the selection of the west option or east option in Pima County.  
17 Tier 2 analysis will also identify measures to avoid, minimize, or mitigate economic impacts.  
18 Specifically, ADOT commits to carrying out the following analysis during the Tier 2 process:

- 19 • **T2-Economic-1:** Use an updated travel demand model that delineates population and  
20 employment projections combined with an assessment of planned/entitled private  
21 developments to determine locations most suitable for ensuring transportation system safety  
22 and mobility.
- 23 • **T2-Economic-2:** Use a more detailed alignment to analyze impacts related to businesses  
24 (including loss of access).
- 25 • **T2-Economic-3:** Evaluate impacts on outdoor recreation and the overall regional economy  
26 by using recent, relevant outdoor recreation data such as the Outdoor Recreation Satellite  
27 Accounts. The Outdoor Recreation Satellite Accounts use tracker surveys to collect  
28 information on visitor spending, on attractions that generate tourist visits, and on how the  
29 alternatives might affect tourists' decisions.

#### 30 3.6.6.2 Mitigation Commitments

31 As required by NEPA, FHWA and ADOT considered measures to avoid, minimize, and mitigate  
32 economic impacts from the Project (generally referred to as mitigation measures) during this  
33 Tier 1 process. Specific mitigation that ADOT is committing to implement if a Build Alternative is  
34 selected includes:

- 35 • **MM-Economic-1:** Locate traffic interchanges to provide transportation access to state lands  
36 and other developable areas while balancing convenient access with potential impacts on  
37 parks and outdoor tourism destinations as a result of the added interchanges.



- 1 • **MM-Economic-2:** Participate in continued, long-term planning efforts with metropolitan  
2 planning organizations, local jurisdictions, resource agencies, and private stakeholders to  
3 cooperatively plan development along the I-11 corridor. The effort would coordinate wildlife  
4 connectivity, local land use planning, and context sensitive design for the I-11 facility. Details  
5 regarding long-term planning efforts are dependent on the planning process for each  
6 individual organization, jurisdiction, and/or agency. ADOT commits to participating in these  
7 efforts but does not have the jurisdiction to lead them (MM-Indirect-1).

### 8 **3.6.6.3 Additional Mitigation to be Evaluated in Tier 2**

9 During the Tier 2 process, ADOT will evaluate mitigation measures in addition to those listed  
10 above, to include best practices, permit requirements, and/or other mitigation strategies  
11 suggested by agencies or the public. Examples of measures that ADOT may evaluate in Tier 2  
12 include:

- 13 • Coordinate with local municipalities to revise county comprehensive and municipal general  
14 plans, zoning ordinances, and capital improvement programs to support the corridor as  
15 needed.
- 16 • Coordinate with local and state entities to assist in adopting financing tools and strategies  
17 targeted to increase investment and job creation along the corridor.
- 18 • Coordinate with local and state entities to assist in implementing business attraction  
19 strategies and efforts to target desirable economic sector development along the corridor.
- 20 • Prepare for and fund infrastructure improvements to planned industrial and business parks  
21 along the corridor in coordination with local municipalities.
- 22 • Coordinate with local municipalities to adopt zoning strategies that support and encourage  
23 recreation compatibility and wildlife connectivity to support mitigation in the Tier 1 Record of  
24 Decision.



1

This page intentionally left blank.