



YMPO RTP Update 2014-2037

Technical Memorandum #1 **Existing Conditions**

Prepared by:



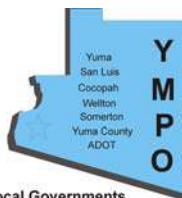
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Prepared for:

Yuma Metropolitan Planning Organization



"Local Governments
And Citizens
Working Together"

February 2013



TABLE OF CONTENTS

1	INTRODUCTION	1
1.1	Overview.....	1
1.2	Description of YMPO.....	1
1.3	Bibliography of Relevant Plans and Studies	4
2	EXISTING CONDITIONS.....	6
2.1	Land Use and Ownership	6
2.1.1	<i>Current Land Use Plans.....</i>	<i>6</i>
2.1.2	<i>Land Ownership.....</i>	<i>10</i>
2.2	Population	12
2.2.1	<i>2010 Population and Housing.....</i>	<i>12</i>
2.2.2	<i>Title VI Populations</i>	<i>12</i>
2.3	Employment	15
2.3.1	<i>Existing Employment</i>	<i>15</i>
2.3.2	<i>Major Employers.....</i>	<i>15</i>
2.3.3	<i>Activity Centers.....</i>	<i>17</i>
2.4	Economic Growth and Development.....	17
2.5	Trade and Tourism.....	18
2.6	Alternative Energy	18
3	ROADWAY NETWORK	19
3.1	Number of Through Lanes	19
3.2	Regionally Significant Routes.....	19
3.3	Functional Classifications	22
3.4	Traffic Volumes	22
3.5	Level of Service.....	25
3.6	Traffic Safety	30
3.7	Bridge Inventory	35
3.8	Programmed Roadway Projects to Add Through Lanes.....	36
4	BICYCLE NETWORK.....	37
4.1	Existing Bicycle Facilities.....	37
4.2	Programmed Bicycle Network Improvement Projects.....	38



5	PEDESTRIAN NETWORK	40
5.1	Existing Sidewalks	40
5.2	Existing Trails and Paths.....	41
5.3	Programmed Pedestrian Network Improvement Projects	41
6	TRANSIT NETWORK.....	42
6.1	Existing Transit Routes	42
6.2	Existing Transit Transfer Hubs.....	44
6.3	Special Transit Services.....	44
6.4	Paratransit Services	45
6.5	Ridership and Operating Costs.....	45
6.6	Upcoming Changes to Transit Routes	45
6.7	Hotel Del Sol Multimodal Transportation Center	45
6.8	Programmed Transit Network Improvement Projects	45
6.9	Transit-Dedicated Sales Tax	46
7	FREIGHT NETWORK.....	47
7.1	Rail Freight	47
7.2	Truck Freight.....	47
7.3	Warehousing and Manufacturing	51
7.4	Programmed Freight Network Improvement Projects	51
8	AVIATION.....	52
8.1	Existing Aviation Facilities.....	52
8.1.1	<i>Yuma International Airport</i>	52
8.1.2	<i>Marine Corps Air Station (MCAS)</i>	52
8.1.3	<i>Rolle Air Field</i>	52
8.2	Programmed Airport Improvement Projects.....	53
9	BORDER INFRASTRUCTURE	54
9.1	Existing Border Facilities	54
9.1.1	<i>International POEs</i>	54
9.1.2	<i>State POEs</i>	55
9.2	Programmed Border Facilities Improvement Projects.....	55



10	TRANSPORTATION SECURITY	56
11	AIR QUALITY	57
11.1	Conformance with Air Quality Standards.....	57
11.2	Transportation Control Measures	57
11.3	Dust Control Action Forecasts	57
11.4	Air Quality Conformity Analysis.....	57
12	ENVIRONMENTAL CONSIDERATIONS	59
APPENDIX A – 2007-2011 FATAL AND INCAPACITATING INJURY CRASH DATA – ALL CRASHES		60
APPENDIX B – 2007-2011 FATAL AND INCAPACITATING INJURY CRASH DATA – PEDESTRIAN AND BICYCLE CRASHES.....		76
APPENDIX C – ARIZONA STATE HIGHWAY SYSTEM BRIDGE FACILITIES (PER ADOT BRIDGE INVENTORY).....		79
APPENDIX D – YMPO REGION LOCAL GOVERNMENT BRIDGE FACILITIES (PER ADOT BRIDGE INVENTORY).....		82



INDEX OF FIGURES

Figure 1 – YMPO Region and Vicinity Map.....	2
Figure 2 – YMPO RTP Focus Area.....	3
Figure 3 – City of Yuma Land Use Plan.....	7
Figure 4 – City of San Luis Land Use Plan	8
Figure 5 – City of Somerton Land Use Plan.....	8
Figure 6 – Town of Wellton Land Use Plan	9
Figure 7 – Yuma County Land Use Plan	10
Figure 8 – Land Ownership	11
Figure 9 – 2010 Population Density per Square Mile.....	14
Figure 10 – Activity Centers.....	17
Figure 11 – Number of Through Lanes on Major Roadways.....	20
Figure 12 – Regionally Significant Routes.....	21
Figure 13 – Federal Functional Classifications for Roadways	23
Figure 14 – 2012 Average Annual Daily Traffic Volumes	24
Figure 15 – Visual Depictions of Levels of Service	27
Figure 16 – Roadways with LOS E or LOS F in 2012	29
Figure 17 – Fatal and Incapacitating Crash Locations (2007-2011).....	31
Figure 18 – Pedestrian and Bicycle Crash Locations (2007-2011)	32
Figure 19 – Crash Locations and Densities (2007-2011)	34
Figure 20 – Existing Bicycle Facilities in the YMPO Region.....	39
Figure 21 – Existing YMPO Region Transit Routes	43
Figure 22 – Designated Truck Routes	50
Figure 23 – Warehousing and Manufacturing Establishments	51



INDEX OF TABLES

Table 1 – Plans and Studies Reviewed	4
Table 2 – YMPO Region Population and Housing.....	13
Table 3 – YMPO Region Employment.....	15
Table 4 – YMPO Region Largest Employers	16
Table 5 – Subarea Sum of Annual Average Daily Traffic Volumes	25
Table 6 – 2012 Seasonal Traffic Volumes by Subarea.....	25
Table 7 – Levels of Service and V/C Ratios.....	26
Table 8 – Generalized Roadway Capacities (LOS F Volume Thresholds)	28
Table 9 – LOS E Volume Thresholds.....	28
Table 10 – Regional Crash Summary by Injury Severity (2007-2011)	30
Table 11 – Bicycle and Pedestrian Crash Summary by Injury Severity (2007-2011).....	30
Table 12 – Crash Rates for High-Density Crash Roadway Segments.....	33
Table 13 – Crash Rates for High-Density Crash Intersections	35
Table 14 – Bicycle Facilities in the City of Yuma.....	37
Table 15 – 2010 YMPO Region Rail Tonnage by Commodity.....	47
Table 16 – 2012 YMPO Region Truck Tonnage by Commodity.....	48
Table 17 – 2012 Mexican Imports/Exports at San Luis by Commodity	49
Table 18 – San Luis POE Border Crossing Data (January 2012-April 2012).....	54
Table 19 – Motor Vehicle Emissions Budget Comparisons.....	58



1 INTRODUCTION

The *2014-2037 Regional Transportation Plan* (RTP) is a 23-year multimodal plan being developed by the Yuma Metropolitan Planning Organization (YMPO) – in conjunction with YMPO member agencies – that addresses the regional transportation system. The 2014-2037 RTP will supersede the current RTP (2010-2033).

1.1 Overview

This document is the first in a series of three Technical Memoranda that will provide input into the final RTP. Technical Memorandum #1 (this document) provides a summary of existing transportation conditions within the YMPO region as it relates to multimodal transportation facilities, traffic levels of service and congestion, and socioeconomic conditions expected to have an impact on transportation.

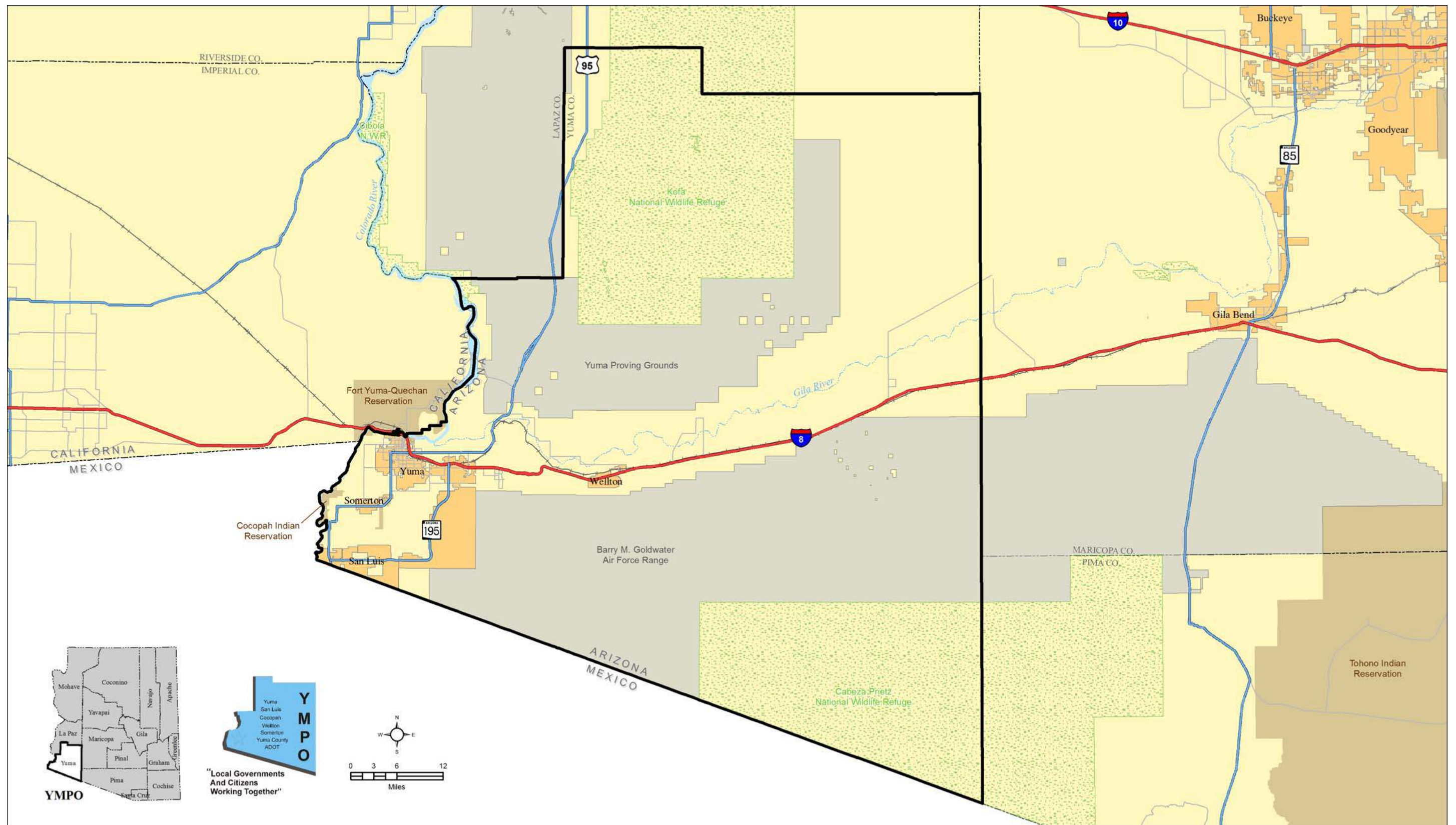
1.2 Description of YMPO

YMPO was formed in 1983 when the Yuma region reached the United States Census population threshold of 50,000 people. This population threshold requires the formation of a Metropolitan Planning Organization (MPO). An MPO is a multimodal transportation policy-making and planning organization which represents local cities and towns, state, tribal, and federal governments. The MPO is responsible for ensuring that federal spending on transportation occurs through a comprehensive, cooperative, and continuing process.

YMPO's mission is to strive to attain and balance multimodal transportation-related needs with finite resources in the YMPO region while promoting a safe environment and enhancing the quality of life in the community. YMPO's planning efforts include coordinating and integrating sustainable solutions, maintaining a continuing 23-year multi-agency comprehensive long-range transportation plan, and maintaining a communicative atmosphere to incorporate public involvement.

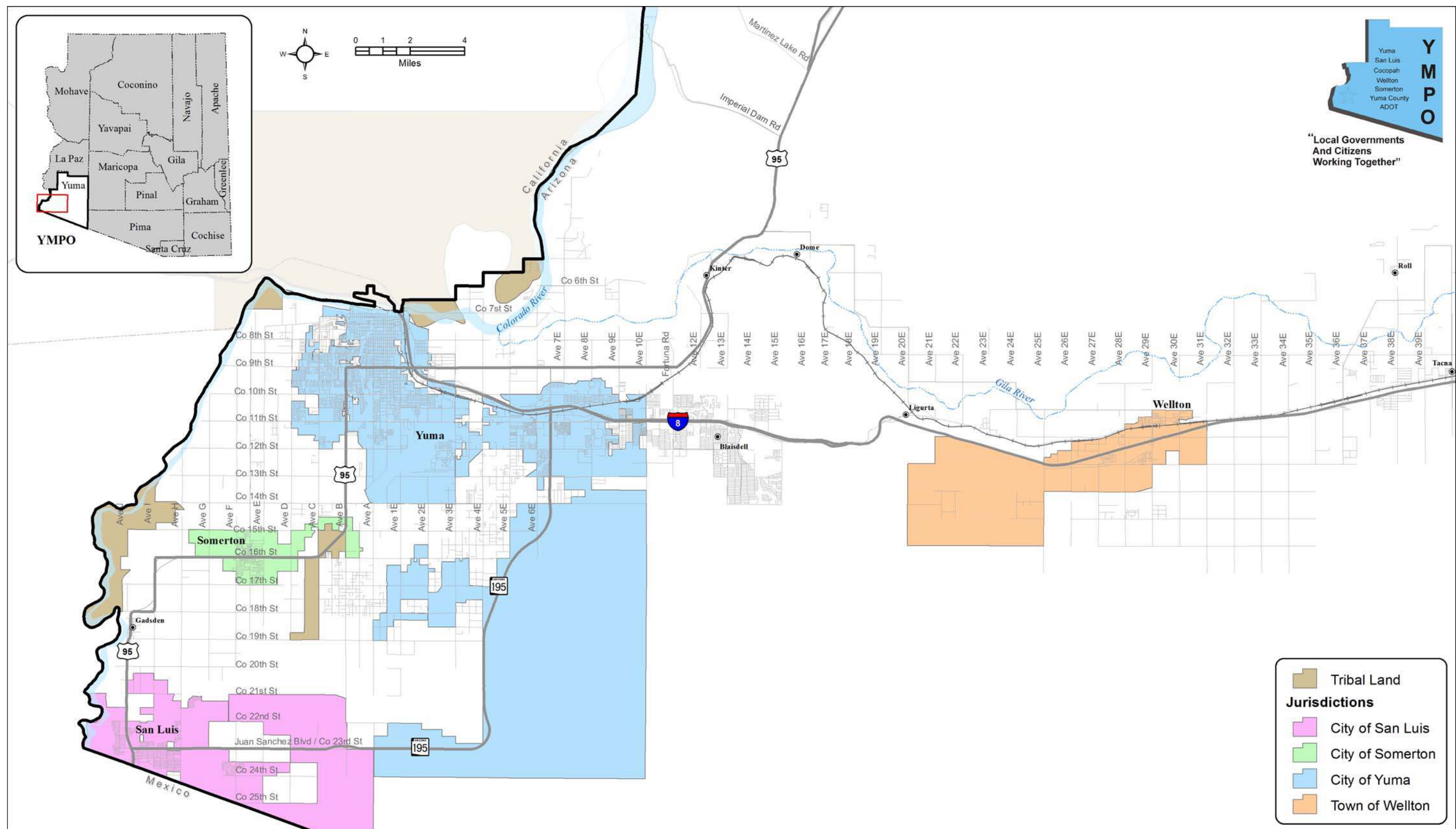
The YMPO region encompasses Yuma County, which is located in the southwestern portion of Arizona, as well as the community of Winterhaven in Imperial County, California, as shown in **Figure 1**. Because the boundary of the YMPO includes parts of both Arizona and California, it is designated a Bi-State MPO. The focus area of the YMPO region is shown in **Figure 2** and constitutes the portion of the region that contains most of the region's population, employment, and land development.

YMPO member agencies include the City of Yuma, Yuma County, the Cocopah Indian Tribe, the Town of Wellton, the cities of Somerton and San Luis, and the Arizona Department of Transportation (ADOT). These member agencies constitute the voting members of YMPO. There are also a number of ex officio representatives of different public agencies that work with the YMPO Executive Board and Technical Advisory Committee. The current ex officio agencies are the Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Environmental Protection Agency (EPA), California Department of Transportation (Caltrans), Yuma County Intergovernmental Public Transportation Authority (YCIPTA), Quechan Indian Tribe, community of Winterhaven, and Imperial County.



Source: ADOT, ASLD

Figure 1 – YMPO Region and Vicinity Map



Source: ADOT, YMPO, Yuma County

Figure 2 – YMPO RTP Focus Area



1.3 Bibliography of Relevant Plans and Studies

Many plans and studies were reviewed in the preparation of this study. A list of the documents reviewed is provided in **Table 1**, grouped by agency.

Table 1 – Plans and Studies Reviewed

YMPO:

- *YMPO Regional Transportation Coordination Plan Update (May 2012)*
- *YMPO Yuma County Rail Corridor Study (2012 – ongoing)*
- *YMPO Transportation Improvement Program (2011-2016)*
- *YMPO 2010-2033 Regional Transportation Plan Final Report (April 2010)*
- *YMPO 2010-2033 RTP Technical Memoranda #1&2 Existing Conditions (April 2009)*
- *Conformity Analysis-Air Quality (December 2010)*
- *Yuma Multimodal Transportation Center Study (July 2000)*

Yuma County:

- *Yuma Foothills and Mesa Del Sol Areas Transportation Needs PARA Study Final Report (April 2012)*
- *Yuma County 2020 Comprehensive Plan (Draft- 2010, Updated- March 2012)*
- *Foothills Solar Plant Yuma Sun News Article (August 2012)*
- *Master Plan for Yuma County Roads (1988)*
- *Yuma County Capital Improvement Plan (FY 2013-2017)*

YCIPTA:

- *Yuma County Area Transit (YCAT) Riders Guide and System Map (September 2012)*
- *Yuma Regional Transit Study (YCAT PARA) Final Report (January 2012)*
- *YCIPTA 10 Year Capital Plan (2012)*
- *YCAT Monthly Report (2011-2012)*
- *YCIPTA Fleet Plan (November 2011)*
- *YCIPTA Annual Report (2010-2011)*
- *YMPO Yuma County Area Transit Development Plan – Part 1 & 2 (May 2003)*

City of Yuma:

- *Yuma Expressway PARA Study (2012 – ongoing)*
- *FY 2013-2017 City of Yuma Capital Improvement Plan (July 2012)*
- *City of Yuma 2012 General Plan (June 2012)*
- *City of Yuma 2012 Community Development Block Grant Action Plan (2012)*
- *City of Yuma 2011-2015 Consolidation Plan (2011)*
- *Yuma High Neighborhood Revitalization Plan (Spring 2009)*
- *Yuma Bicycle Facilities Master Plan (2009)*
- *Yuma Major Roadways Plan (April 2005, amended November 2007)*
- *Yuma Fire Services and Facilities Plan (2007)*
- *Yuma Parks and Recreation Facility Plan (2006)*
- *Giss Parkway Initial Project Assessment (August 2012)*



Town of Wellton:

- *Transportation Long-Range PARA Study Final Report (2010)*
- *Town of Wellton General Plan 2003-2013 (October 2003)*

City of San Luis:

- *Binational San Luis Transportation Study –Working Paper No.1 San Luis Existing and Future Conditions (July 2012)*
- *City of San Luis General Plan 2020 (June 2011)*
- *Financial Report (2009-2010)*
- *City of San Luis Small Area Transportation Study Final Report (2009)*

City of Somerton:

- *Road Diet – Downtown Somerton Existing Conditions Summary (August 2012)*
- *City of Somerton Comprehensive Transportation Plan Working Paper #1 (October 2012)*
- *City of Somerton 2010 General Plan Update (December 2010)*
- *City of Somerton Small Area Transportation Study Final Report (December 2006)*
- *City of Somerton Shared Use Pathway and Trails System Master Plan (May 2005)*

Cocopah Indian Reservation:

- *Cocopah Transportation PARA Study (2012 – ongoing)*
- *Cocopah Comprehensive Plan (1976)*

Bureau of Land Management:

- *Yuma Field Office Approved Resource Management Plan (January 2010)*
- *Anza Trail Guide – Yuma County (undated)*

ADOT:

- *Bicycle Safety Action Plan Draft Final Report (June 2012)*
- *Long-Range Transportation Plan 2010-2035 (November 2011)*
- *Statewide Rail Framework Study (March 2010)*
- *Pedestrian Safety Action Plan – Final Report (June 2009)*
- *Arizona-Sonora Border Master Plan (2012 – ongoing)*

Winterhaven/Quechan:

- *Winterhaven/Quechan Reservation Rural Connector Study (July 2008)*
- *Winterhaven Urban Area Plan (November 1996)*

Imperial County

- *Imperial County General Plan Overview*

Airport:

- *MCAS-Yuma Master Plan (2007)*
- *Yuma International Airport Master Plan (1999)*

WACOG:

- *District 4 Housing Assessment and Strategy (November 2005)*



2 EXISTING CONDITIONS

This chapter describes land use, population, and employment in the YMPO region. Land use, population, and employment are relevant to transportation planning because they are key data for determining travel demand on the region's transportation network.

2.1 Land Use and Ownership

Land uses (and similarly zoning) help in analyzing how the transportation system will grow and be affected by land uses. Land uses with higher densities typically generate more traffic. The more that traffic is generated, the more the traffic volumes on the transportation system will increase. As traffic volumes increase, the level of service of the transportation system will decrease if nothing is done to accommodate the higher volumes, such as increasing capacity of the transportation system. Therefore, land uses are analyzed to help understand existing and future travel demand.

2.1.1 Current Land Use Plans

Current land use categories are designated and defined by the individual jurisdictions. These land use designations do not necessarily correspond to existing land uses but rather indicate how the jurisdictions intend the land to be used.

City of Yuma

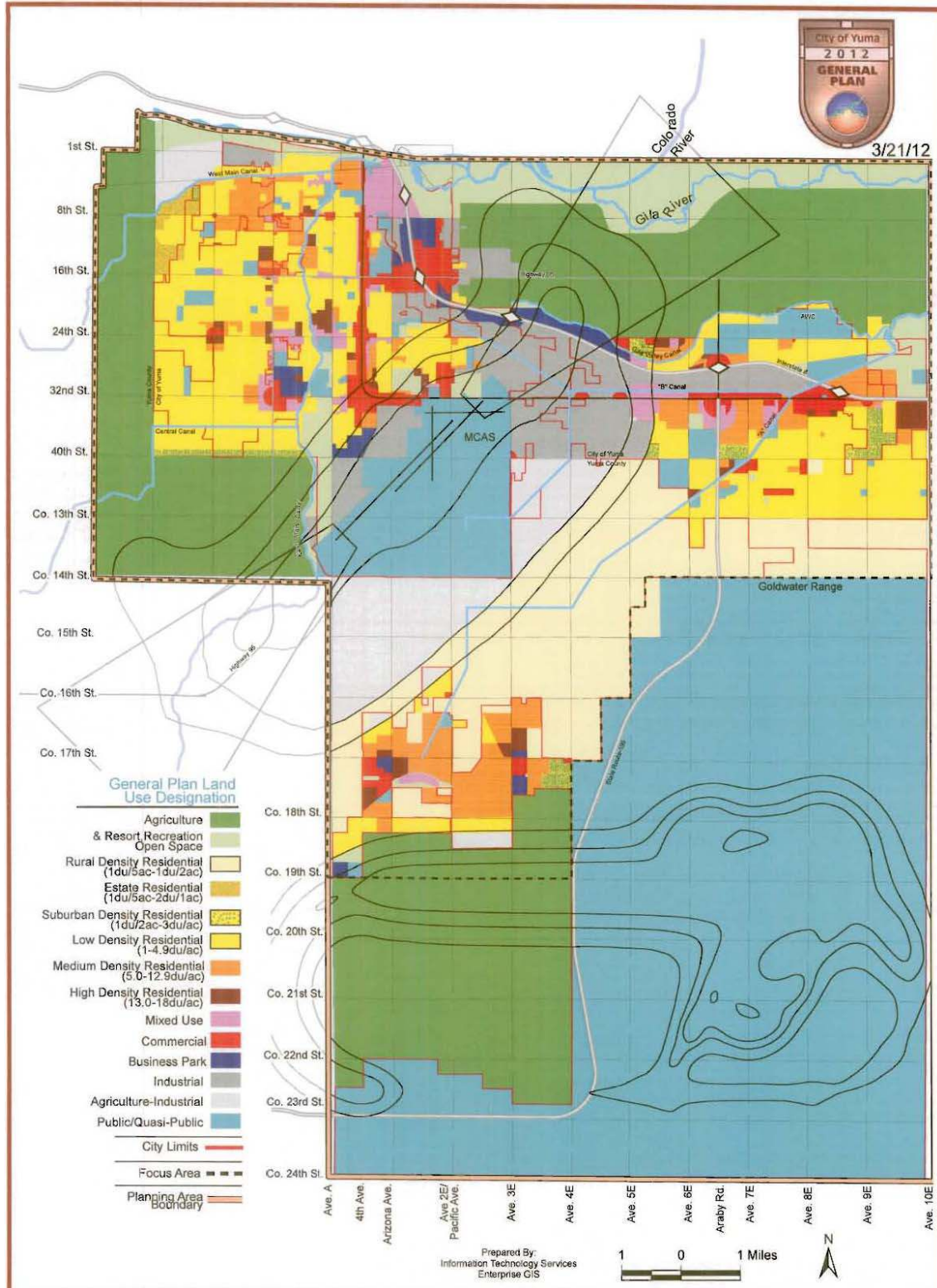
The *City of Yuma General Plan* designates thirteen different land uses, including residential of varying densities, commercial, mixed use, business park, industrial, agricultural, public/quasi-public, and resort/recreational/open space. The City of Yuma's land use plan is shown in **Figure 3**. The Marine Corps Air Station – Yuma (MCAS) is a large facility that is centrally located in Yuma and influences the location and designation of adjacent land uses. Residential land uses are generally located either northwest or southeast of MCAS. Agriculture land uses are generally located on the north, south, and west edges of the City. Industrial land uses are primarily in the vicinity of MCAS. Commercial land uses are primarily located along the major transportation facilities, such as Interstate 8 (I-8), 4th Avenue, 16th Street, and 32nd Street. The Barry M. Goldwater Air Force Range (BMGR) takes up a large portion of the public/quasi-public land on the south and east sides of the City.

City of San Luis

The *City of San Luis General Plan* utilizes the eight form-based land use designations shown in **Figure 4** rather than conventional land use designations. Form-based land uses focus on how buildings relate to each other, adjacent streets, and neighboring properties rather than on the way the land is being used. Business and activity center land uses are associated with the major roadways in the area. Neighborhood and ranchette land uses are generally adjacent to the business and activity center land uses, with agricultural and conservation land uses concentrated on the edges of San Luis. Industrial land uses are located in the vicinity of Rolle Airport and the San Luis II Port of Entry (POE).

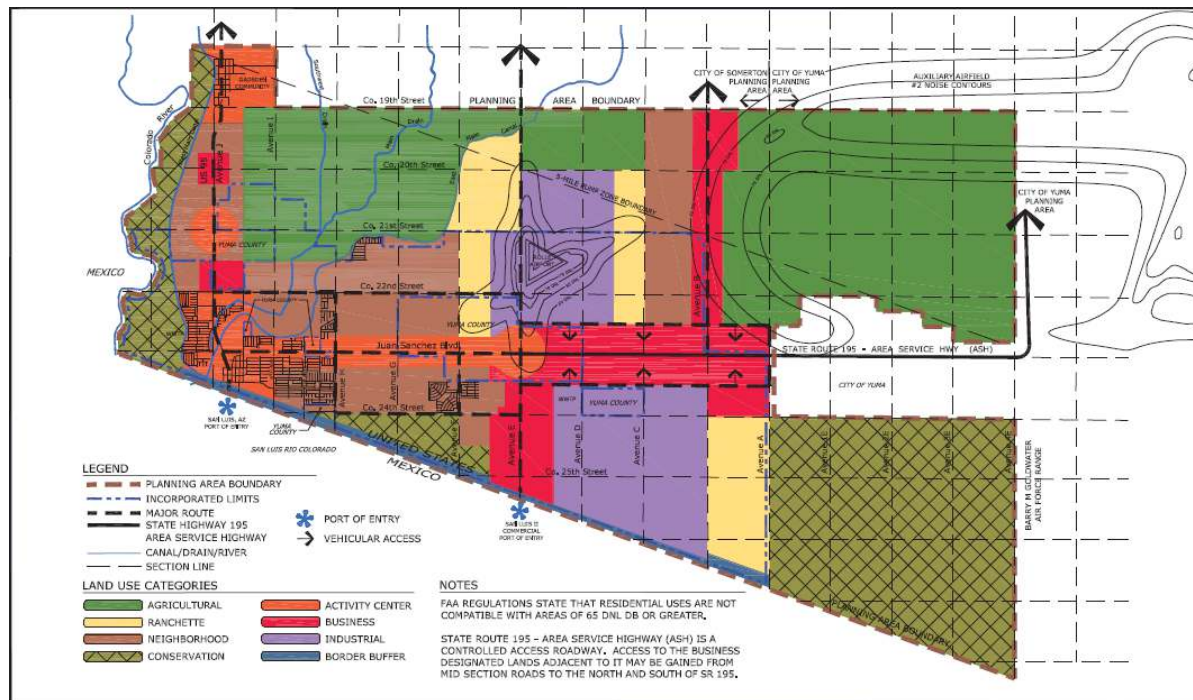
City of Somerton

The *City of Somerton General Plan* shows ten designated land uses, including residential of varying densities, commercial, employment, agriculture, industrial, public facilities, and recreation/open space. There is also a downtown overlay district. The City of Somerton's land use plan is shown in **Figure 5**. Agriculture is the dominant land use in Somerton and is primarily located outside of the developed areas of Somerton. Residential land uses are focused in the developed areas of Somerton. Commercial and industrial land uses are located primarily along US 95/Main Street.



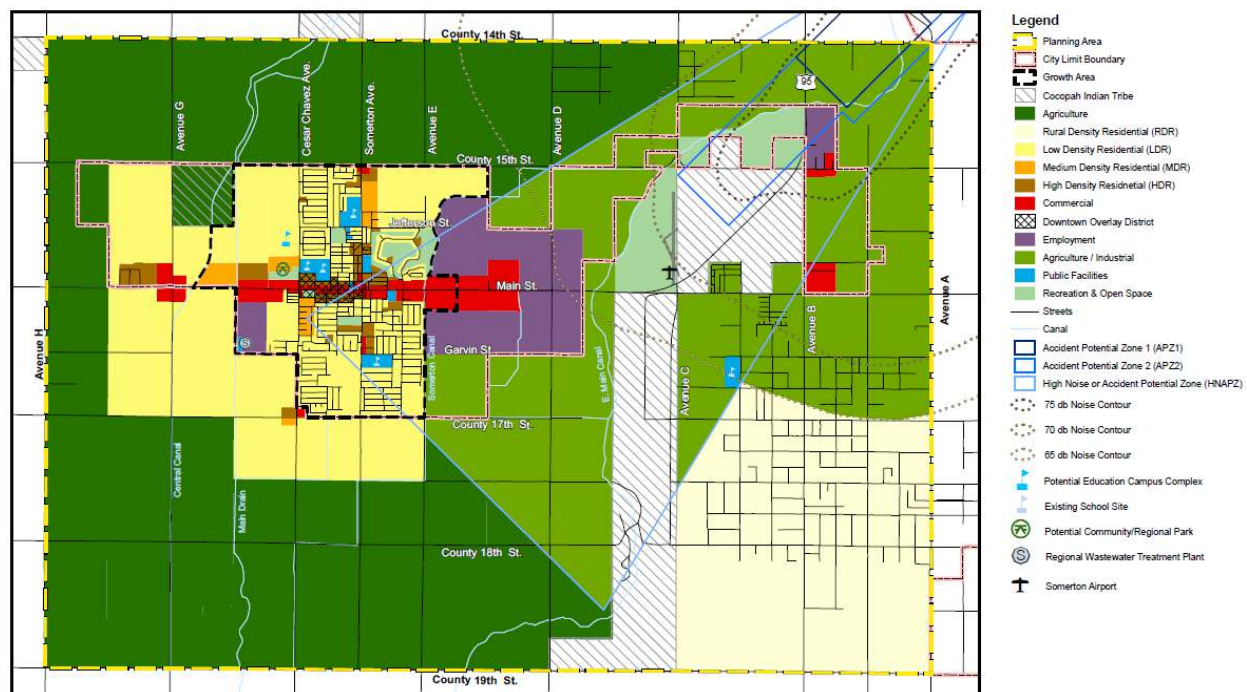
Source: City of Yuma General Plan

Figure 3 – City of Yuma Land Use Plan



Source: City of San Luis General Plan

Figure 4 – City of San Luis Land Use Plan



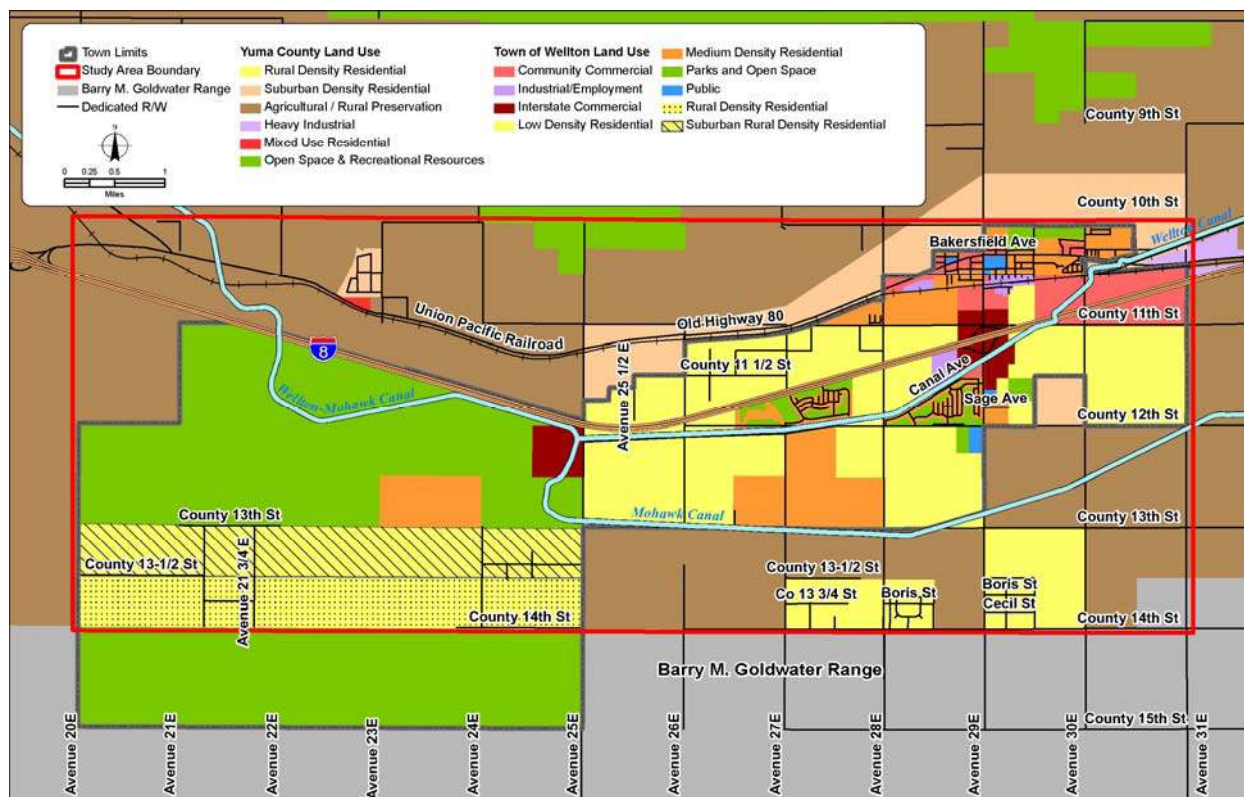
Source: City of Somerton General Plan

Figure 5 – City of Somerton Land Use Plan



Town of Wellton

The *Town of Wellton General Plan* identifies nine land use designations, including residential of varying densities, commercial, industrial/employment, public, and parks/open space. The Town of Wellton's most recent land use plan is shown in **Figure 6**. Commercial land uses are designated along I-8 and Old Highway 80 while industrial land uses are generally designated near the Union Pacific Railroad (UPRR) tracks. Residential land uses are designated across the town, with the highest densities generally near I-8 and Old Highway 80. The BMGR south of Wellton restricts land uses on the south side of town.



Source: Town of Wellton Transportation Long-Range Plan PARA Study

Figure 6 – Town of Wellton Land Use Plan

Cocopah Indian Reservation

The Cocopah Indian Reservation is comprised of three noncontiguous bodies of land known as the North, East, and West Reservations, which collectively comprise over 6,500 acres. Each reservation area has its own unique mix of land uses. Key land uses include agriculture, gaming, services and retail, and tourism and recreation.

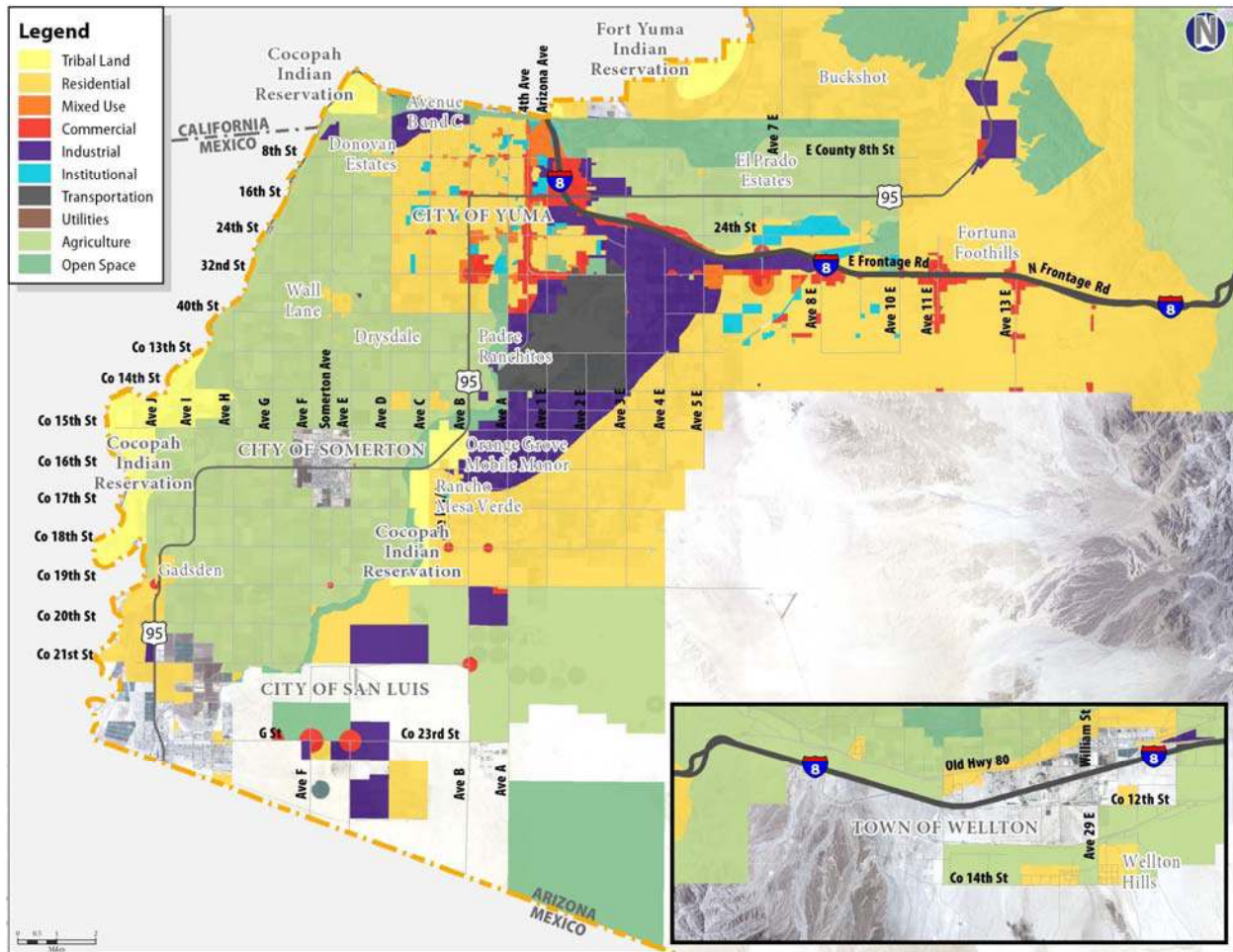
Winterhaven

The Winterhaven urban area is a relatively small low density residential and commercial center surrounded by agricultural lands. Further expansion opportunities are limited due to the presence of the Fort Yuma-Quechan Indian Reservation to the north, west, and the Colorado River to the south.



Yuma County

There are nine identified planning areas within the unincorporated portions of Yuma County. Each of these planning areas has various land uses, with the most predominant land uses being agricultural, residential, open space and recreational resources. The *Yuma County 2020 Comprehensive Plan* provides graphics showing the land use designations in each planning area. The land uses for the focus area of the YMPO RTP are shown in **Figure 7**.



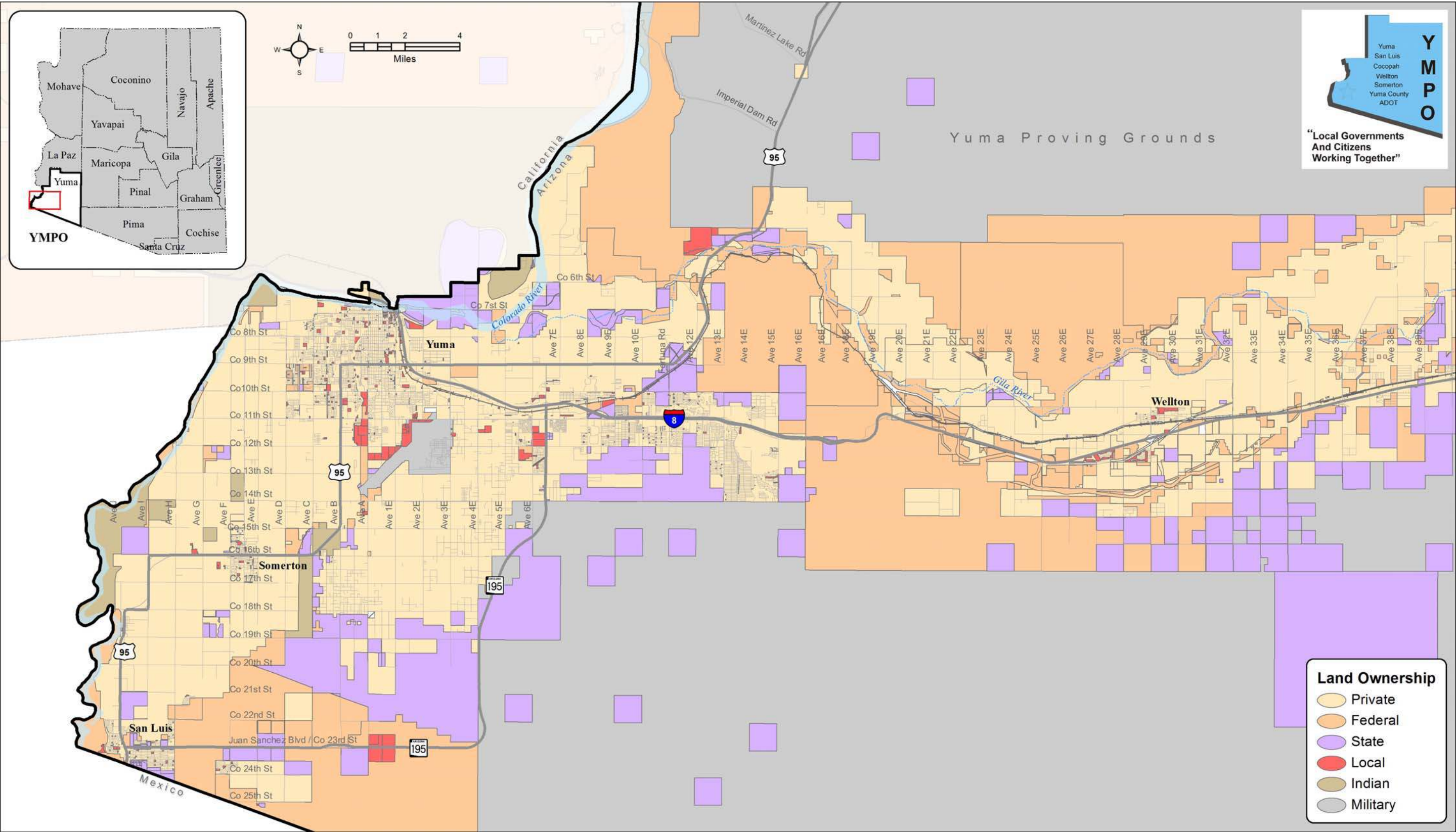
Source: Yuma Regional Transit Study (YCAT PARA)

Figure 7 – Yuma County Land Use Plan

2.1.2 Land Ownership

Land ownership in the YMPO region is shown in **Figure 8**. A summary of what is included in each of the land ownership categories is as follows:

- Private – private land ownership occurs throughout the region. Primary private land uses are agricultural, commercial and residential uses.
- Federal – federal land ownership includes lands owned and managed by the Yuma Field Office of the Bureau of Land Management (BLM) or the Bureau of Reclamation (BOR).
- State – this land is primarily State Trust Land managed by the Arizona State Land Department (ASLD). It is primarily undeveloped or used for agricultural purposes.



Source: ADOT, ASLD

Figure 8 – Land Ownership



- Local – local land ownership includes local jurisdiction properties for government and school land uses.
- Indian – tribal lands include the Cocopah Indian Reservation in three separate reservation areas and the Fort Yuma-Quechan Indian Reservation.
- Military - U.S. military lands include the BMGR, MCAS, and Yuma Proving Ground (YPG).

2.2 Population

Population impacts the regional transportation system as there is generally a correlation between population growth and travel demand growth. The YMPO travel demand model is based in part on the number of occupied housing units, which can be derived from population data based on information provided by the U.S. census.

2.2.1 2010 Population and Housing

The YMPO region has seen a large increase in population since the 2000 census. Overall, population in Yuma County has increased 22 percent (2 percent annually) since the 2000 census. The 2010 census data indicates that the 2010 Yuma County year-round population was 195,751, with 87,850 housing units and an occupancy rate of 74%. **Table 2** shows 2010 population and housing data for the municipalities and census designated places (CDPs) in the YMPO region. CDPs represent populations of people settled in an area that is not defined by name and which is not incorporated legally. The Arizona Department of Administration recently released 2012 population estimates (www.workforce.az.gov/population-estimates.aspx) that indicate Yuma County has a 2012 population of approximately 205,174, with most of the growth since 2010 occurring in San Luis (2012 population estimate of 31,080).

It is important to note that the YMPO region's population typically increases by 40-50 percent in the winter due to seasonal employment and tourism. Another important consideration is the population of San Luis Rio Colorado, across the border from the City of San Luis. San Luis Rio Colorado, which is part of Sonora, Mexico, has a population of over 250,000, according to the *San Luis General Plan 2020*. While the winter visitor and San Luis Rio Colorado populations are not included in population statistics for the YMPO region, these population groups do generate additional travel demand on the regional transportation system, particularly during the winter time.

A graphical representation of population density per square mile is provided in **Figure 9** based on the 2010 census data. Population density measures the distribution of the population across the YMPO region. The most densely populated areas in the YMPO region generally correspond to the older, more fully developed, portions of the cities of Yuma, Somerton, and San Luis and the Town of Wellton.

2.2.2 Title VI Populations

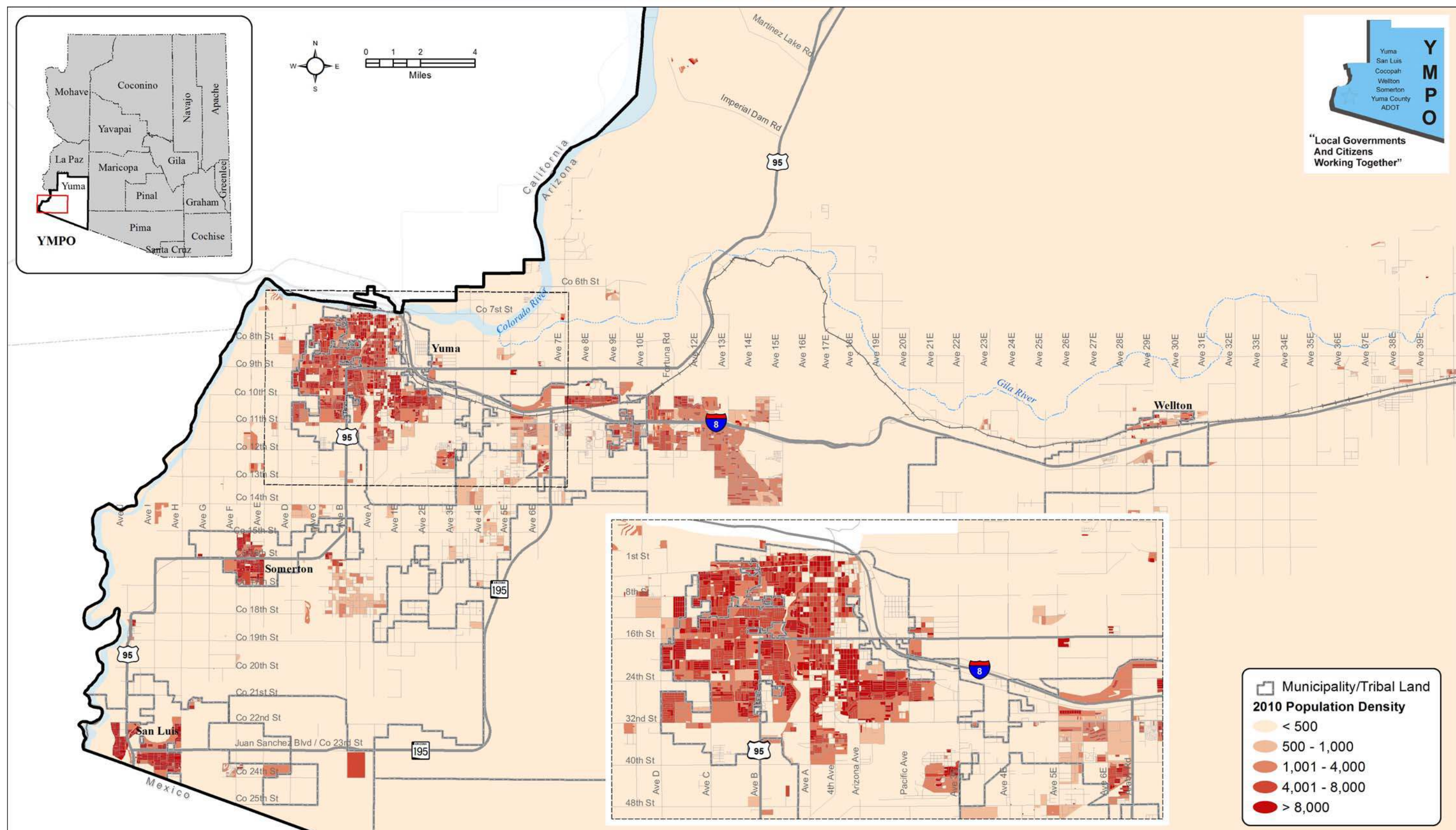
Title VI population groups are important in the context of transportation planning. Title VI of the *Civil Rights Act of 1964* and related statutes indicate that individuals cannot be discriminated against due to race, sex, color, national origin, age, or disability. *Executive Order 12898* was signed in 1994, adding minority and low-income populations to the list of protected population groups with the goal of achieving environmental justice. The U.S. Department of Transportation ordered in 1997 that steps must be taken during the planning and implementation of transportation projects to avoid disproportionately high and adverse impacts to these protected populations. Title VI populations will be identified and discussed further in Technical Memorandum #2.



Table 2 – YMPO Region Population and Housing

Place	Population				Housing Units (2010 Census)		
	2000 Census	2010 Census	Total % Change 2000- 2010	Average Annual Growth Rate % 2000- 2010	Total Housing Units	Occupied Housing Units	Housing Occupancy Rate
City of San Luis	15,322	25,505	66%	5.2%	6,525	5,953	91%
City of Somerton	7,266	14,287	97%	7.0%	4,052	3,791	94%
Town of Wellton	1,829	2,882	58%	4.7%	2,081	1,220	59%
City of Yuma	77,515	93,064	20%	1.8%	38,626	30,714	80%
Cocopah Indian Tribe	1,025	817	-20%	-2.2%	753	312	41%
Quechan Indian Tribe (AZ part)	36	8	-78%	-14.0%	10	7	70%
Avenue B and C CDP	4,798	4,176	-13%	-1.4%	1,968	1,451	74%
Donovan Estates CDP	1,623	1,508	-7%	-0.7%	394	374	95%
El Prado Estates CDP	478	504	5%	0.5%	199	157	79%
Fortuna Foothills CDP	20,478	26,265	28%	2.5%	21,642	12,006	55%
Gadsden CDP	953	678	-29%	-3.3%	225	192	85%
Rancho Mesa Verde Manor CDP	767	625	-19%	-2.0%	162	153	94%
Orange Grove Mobile Manor CDP	729	594	-19%	-2.0%	174	165	95%
Tacna CDP	555	602	8%	0.8%	291	216	74%
Other unincorporated areas	35,047	24,236	-31%	-3.6%	10,748	8,056	75%
<i>Yuma County Overall</i>	<i>160,026</i>	<i>195,751</i>	<i>22%</i>	<i>2.0%</i>	<i>87,850</i>	<i>64,767</i>	<i>74%</i>
Winterhaven CDP	3,387	3,052	-10%	-1.0%	1,496	1,057	71%

Source: Yuma Regional Transit Study (YCAT PARA), based on the 2000 U.S. Census and the 2010 U.S. Census



Source: 2010 U.S. Census

Figure 9 – 2010 Population Density per Square Mile



2.3 Employment

2.3.1 Existing Employment

The three industries that are the main contributors to the region's growth and economy are the agricultural, military, and tourism industries. Employment data from the 2010 census is shown in **Table 3** for the municipalities and CDPs in the YMPO region. The YMPO region's employment numbers are typically highest in the winter due to seasonal agricultural employment and tourism and lowest in the summer.

Table 3 – YMPO Region Employment

Place	Employment (2010 Census)
City of Somerton	4,736
Town of Wellton	657
City of Yuma	36,334
Cocopah Indian Tribe	158
Quechan Indian Tribe (CA-AZ)	548
Avenue B and C CDP	1,564
Donovan Estates CDP	628
El Prado Estates CDP	96
Fortuna Foothills CDP	8,148
Gadsden CDP	167
Rancho Mesa Verde Manor CDP	208
Orange Grove Mobile Manor CDP	69
Tacna CDP	91
Other unincorporated areas	14,718
<i>Yuma County Overall</i>	<i>68,122</i>
Winterhaven CDP	807

Source: 2010 U.S. Census – American Community Survey

2.3.2 Major Employers

Table 4 shows some of the largest employers in the YMPO region. The military bases are the largest single employers in the YMPO region, followed by the Yuma Regional Medical Center, the City of Yuma, and Yuma County. A number of the larger employers support the agriculture employment sector. There are also several large employers in the education, food, retail, hospitality, healthcare, and administrative services sectors.



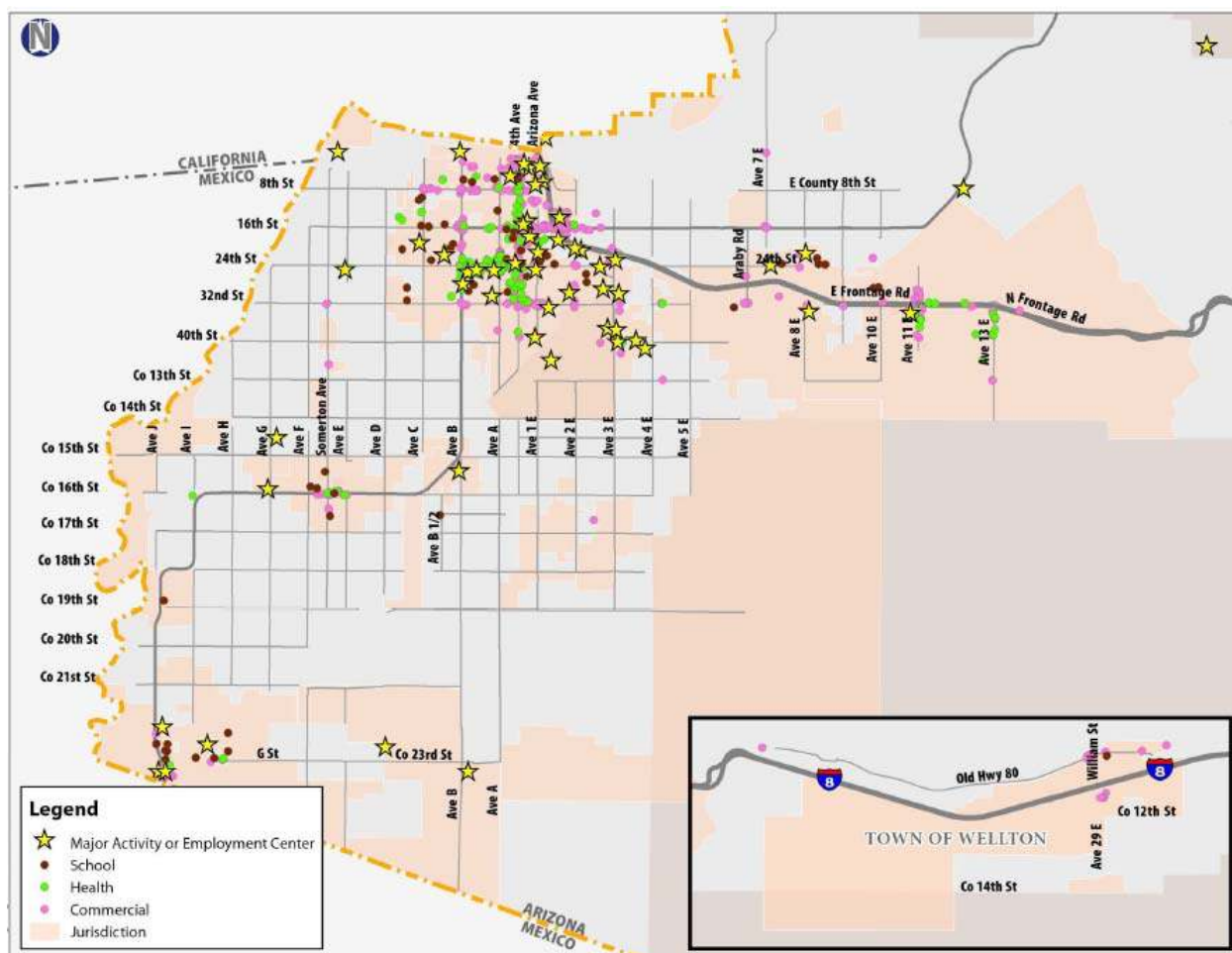
Table 4 – YMPO Region Largest Employers

Employer	Approximate Number of Employees	Activity
MCAS	6,000 (including about 1,200 civilians)	Military
YPG, including General Motors Desert Proving Ground	Over 3,000 military and civilians	Military
Yuma Regional Medical Center	2,000	Health Care
City of Yuma	1,350	Government
Yuma County	1,350	Government
US Border Patrol	900	Government
Advanced Call Center Technologies (ACT)	800	Call Center
Quechan Paradise Casino	800	Casino
Arizona State Prison Complex (ASPC) Yuma	750	Government
Nation's Health Call Center	750	Call Center
Cocopah Indian Tribe	600	Government
Datepac	500	Agribusiness
Skyview Cooling Company	500	Agribusiness
Arizona Western College	350 full-time, 650 part-time, and student workers	Education
Walmart-Avenue B	400	Retail
Shaw Industries	350	Manufacturing
Walmart-Pacific Avenue	350	Retail
Walmart-Foothills	300	Retail
Cocopah Bingo & Casino	300	Casino
Wal-Mart-San Luis	300	Retail
Grower's Company	300	Agribusiness
City of San Luis	250	Government
Gowan Milling	200	Manufacturing
Bill Alexander Automotive	200	Retail
Life Care Center of Yuma	200	Health Care
Dillard's-Yuma Palms Regional Center	200	Retail
US Bureau of Reclamation	200	Government
Mission Citrus	200	Agribusiness
Sam's Club-Yuma Palms Regional Center	200	Retail

Source: Yuma Regional Transit Study (YCAT PARA), InfoUSA, Yuma Daily Sun

2.3.3 Activity Centers

The location of activity centers in the region generally corresponds to the areas where population and employment numbers are high. Some of the largest activity centers in the region are the MCAS and YPG military installations. Another large activity center is the Yuma Regional Medical Center. The agricultural industry creates numerous activity centers in the region such as food processing facilities. There are many tourist activities in the YMPO region such as hospitality and food services. There are also educational centers in the region and many commercial and retail centers. A graphic from the *YCAT PARA Study* that shows major activity centers in the YMPO region is shown in **Figure 10**.



Source: Yuma Regional Transit Study (YCAT PARA)

Figure 10 – Activity Centers

2.4 Economic Growth and Development

Economic growth and development will impact, and be impacted by, the regional transportation system. Each jurisdiction in the YMPO region has a plan for growth and development related to existing and planned land uses. There is also a regional organization for economic development initiatives in the YMPO region known as the Greater Yuma Economic Development Corporation (GYEDC). Per the



GYEDC website (www.greateryuma.org), GYEDC targets several industries for economic growth and development, including the following:

- Agribusiness and food technology
- Military and defense testing
- Industrial manufacturing
- Freight logistics and distribution
- Renewable energy
- Maquiladora operations (cross-border free trade zone factories)

2.5 Trade and Tourism

The North American Free Trade Agreement (NAFTA) is an important aspect of the YMPO region economy because it regulates cross-border trade at the U.S./Mexico border between the city of San Luis in the YMPO region and the city of San Luis Rio Colorado in Mexico. Cross-border trade utilizes the YMPO regional transportation system (San Luis II POE, I-8, State Route (SR) 195, US 95, and UPRR tracks) to carry goods via trucking and railroad with local, regional, state, or national origins and destinations.

Tourism is one of the biggest industries in the YMPO region. Entities such as the Yuma Visitors Bureau promote tourism-related activities such as recreational activity along the Colorado River, preserving open space for recreational purposes, camping and recreational vehicle facilities, ensuring that the fish and wildlife populations and habitats are supported for activities such as hunting, angling, and wildlife watching, and special events such as festivals that encourage unique interests. Tourism results in increased travel on the regional transportation system, particularly during the winter time when tourism activities and visitor numbers are at their peak.

2.6 Alternative Energy

Nonrenewable fossil fuels have historically been the source of the YMPO region's needed energy. In recent years, there has been more interest in sustainability and the use of alternative energy sources that are renewable. Potential types of renewable energy include biomass, geothermal, hydrogen, solar, and wind. With plentiful sunshine and large tracts of undeveloped land in the YMPO region, several solar power generating facilities are in various stages of development, including:

- 16 megawatt (MW) Hyder I plant near Hyder – completed in 2011
- 35 MW Foothills plant near the Yuma Foothills – under construction, to be complete in 2013
- 14 MW Hyder II plant near Hyder – proposed for construction in 2013
- 290 MW Agua Caliente plant near Dateland – under construction, to be complete in 2014
- 20 MW San Luis plant near San Luis – proposed for construction in 2014

Another renewable energy facility proposed in Yuma County is a pair of wind towers near San Luis that combined would provide up to 2,500 MW of power.

These renewable energy facilities have typically required modifications to the anticipated land use plans and zoning for the underlying land. These changes in land use and zoning translate into changes in the assumed travel demand generated by the land.



3 ROADWAY NETWORK

This chapter describes features of the roadway network in the YMPO region. This includes the number of lanes, regionally significant routes, functional classifications, traffic volumes, levels of service, traffic safety, bridge inventory, and programmed roadway projects.

3.1 Number of Through Lanes

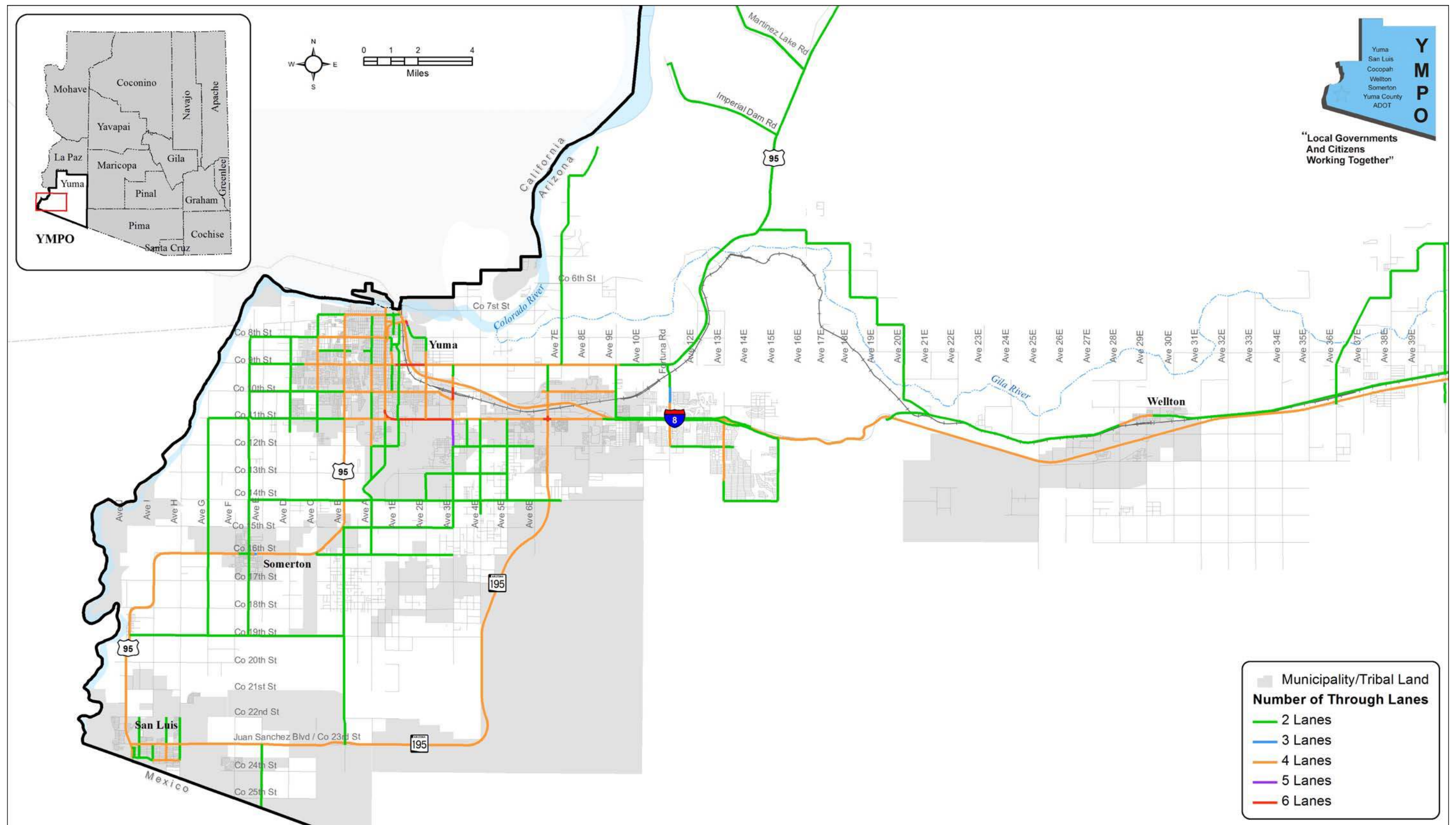
The number of through lanes on a roadway plays a key role in the capacity and operations of that roadway. **Figure 11** shows the number of existing through lanes for major roadways in the YMPO region. Where roadway widening projects are ongoing – such as on Avenue 3E between Gila Ridge Road and 24th Street – the post-construction number of through lanes is shown.

Most major roadways in rural areas have two through lanes – one in each direction – while most major roadways in urban areas have four through lanes. There are also a few roadway segments with six through lanes, most notably on 16th Street and 32nd Street. While the number of through lanes has generally increased over time to accommodate increased traffic volumes, there are cases where the number of through lanes has decreased, such as in Somerton, where a “road diet” recently resulted in the conversion of Main Street/US 95 from a four-lane roadway to a two-lane roadway with on-street parking.

3.2 Regionally Significant Routes

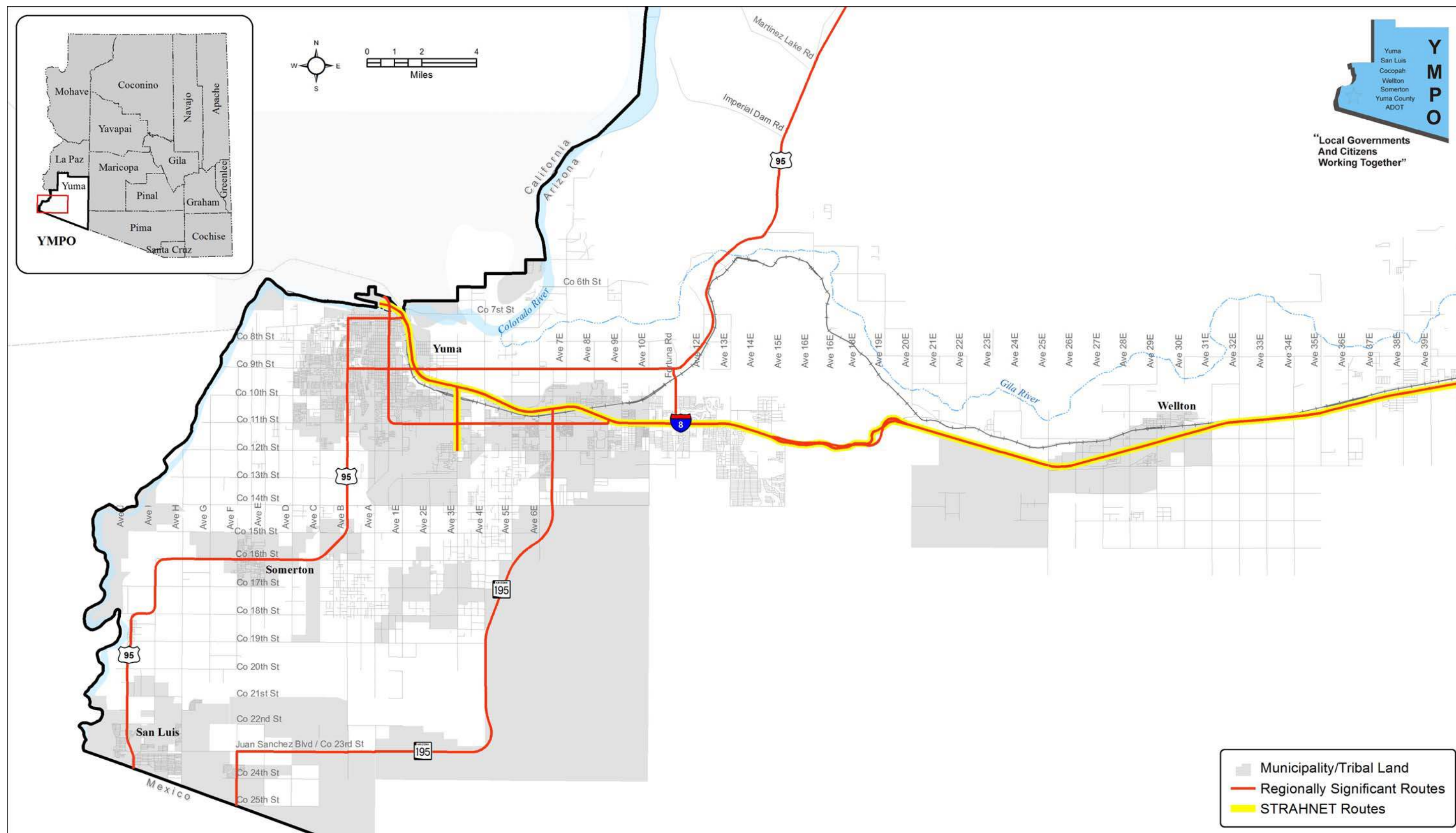
YMPO has designated several roadways (typically freeways or principal arterials) as Regionally Significant Routes (RSR) for the region. The RSR facilities are shown in **Figure 12**. Key RSR facilities include I-8, Business 8 (32nd Street and 4th Avenue), US 95, and SR 195. I-8 is the only interstate facility in the YMPO region – it runs east/west, connecting the City of Yuma to the Town of Wellton and the YMPO region to the San Diego, Phoenix, and Tucson urban areas. Business 8 is the business loop for I-8 that goes through the commercial core of the City of Yuma along 32nd Street and 4th Avenue. US 95 generally runs north/south, connecting the City of San Luis, City of Somerton, Cocopah East Reservation, and City of Yuma. US 95 also connects the YMPO region to Mexico, YPG, and Quartzsite (I-10). SR 195 is a relatively new addition to the list of RSRs and it is mainly intended for use as a regional commercial vehicle route between I-8 and the U.S./Mexico commercial POE at San Luis. Other RSRs in the YMPO region are 1st Street, Avenue 3E, Avenue B, Avenue E, and Fortuna Road.

Also included in **Figure 12** is the Strategic Highway Network (STRAHNET), which is a system of roads to accommodate military needs such as emergency mobilization or the movement of armor, ammunition, food, and other commodities. In the YMPO region, the designated STRAHNET routes are I-8 and Avenue 3E, which provide access to MCAS as well as BMGR. While US 95 also provides access to a military facility (YPG), it is not currently designated as a STRAHNET route.



Source: YMPO, ADOT

Figure 11 – Number of Through Lanes on Major Roadways



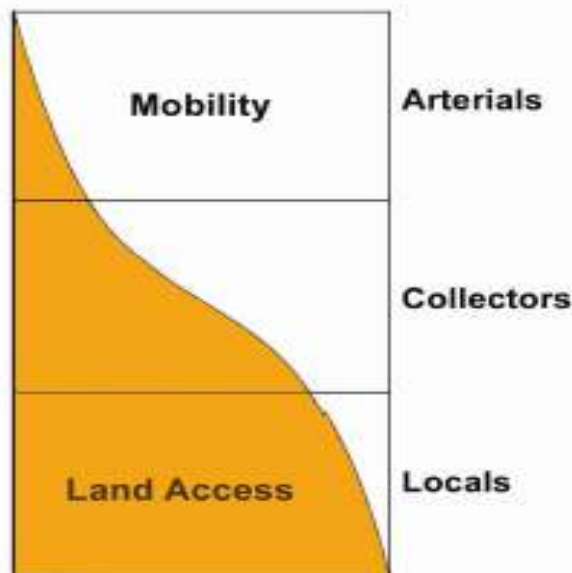
Source: YMPO

Figure 12 – Regionally Significant Routes

3.3 Functional Classifications

Functional classification is the process by which roadways are grouped according to the character of traffic service they are intended to provide. These classifications are used in transportation system planning, roadway design, and determining eligibility for federal roadway improvement funds. The federal functional classification of roads in the YMPO region area is shown in **Figure 13**.

In general, the interstate and arterial system provides a high level of mobility for the traveling public and minimal allowance for access, while collectors and local streets provide for residential and non-residential access. This tradeoff between land access and mobility is depicted in the graphic at right.



Mobility vs. Access Relationships
 Source: Federal Highway Administration

3.4 Traffic Volumes

YMPO conducts daily traffic counts twice annually at 188 locations around the YMPO region. These locations are grouped into six separate subareas. Daily traffic volumes on I-8 provided by ADOT are used for a seventh subarea called Interstate. The 2012 annual average daily traffic counts provided by YMPO for the 188 locations have winter volumes and summer volumes, as well as a factored average of both the winter and summer volumes. The factored average volumes represent the volumes included in the travel demand model to help calibrate the model and as such are considered the appropriate volumes to use in this study. **Figure 14** shows the subarea boundaries and the 2012 average traffic counts for the region. The counts are summed by subarea and then compared to the same subarea sums of the 2011 traffic counts. The Wellton-Mohawk and Interstate subareas had lower summed traffic volumes in 2012 than 2011 while all other subareas had higher summed traffic volumes in 2012 than 2011. The total overall volume for all the subareas grew by 4.6 percent between 2011 and 2012. The summed 2012 volumes by subarea and percent change compared to 2011 volumes can be seen in **Table 5**.

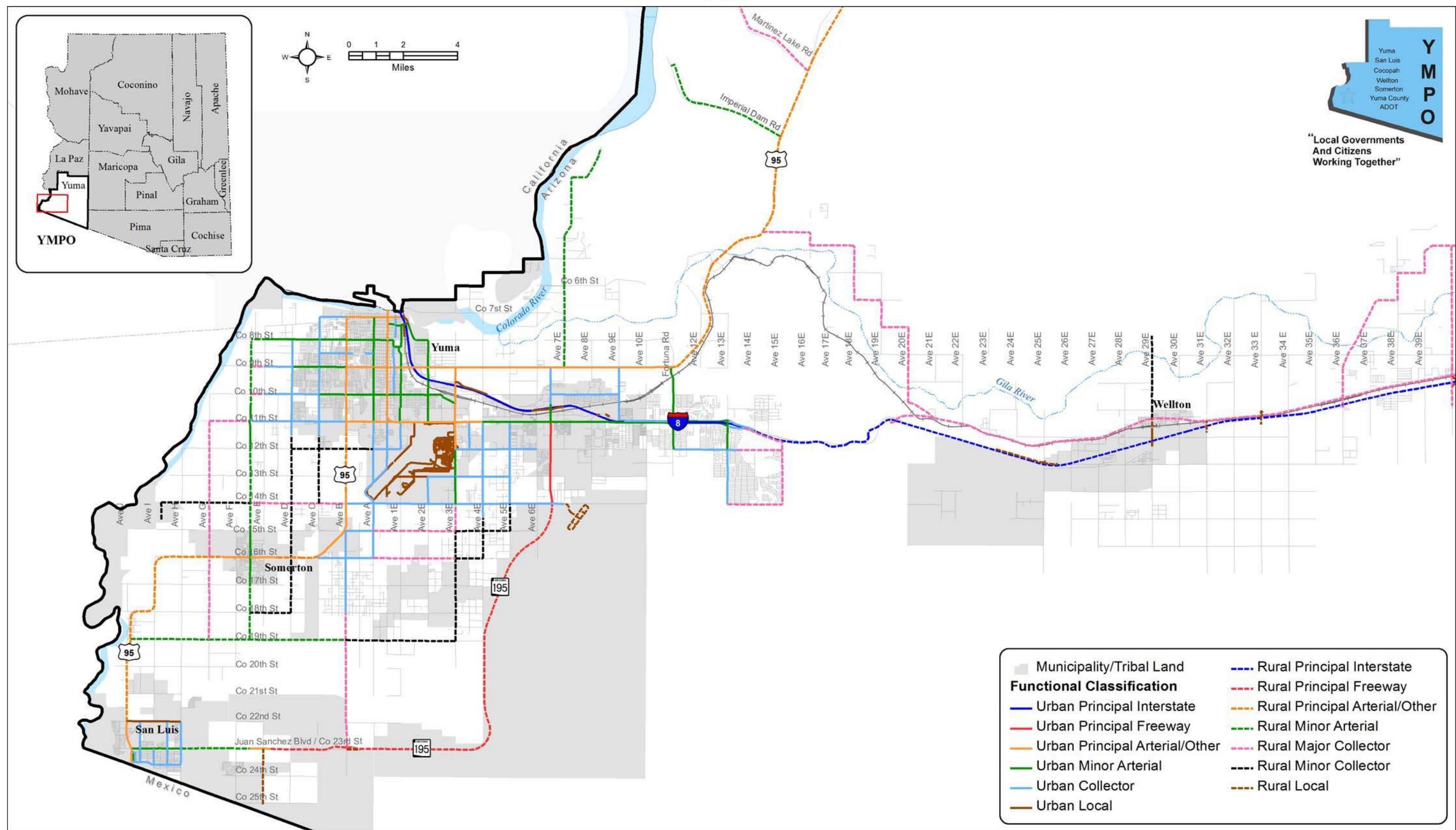


Figure 13 – Federal Functional Classifications for Roadways



YMPO RTP Update
Technical Memorandum # 1
Existing and Future Conditions



Table 5 – Subarea Sum of Annual Average Daily Traffic Volumes

Subarea	Sum of 2012 Annual Average Daily Traffic Volumes	Percent Change from 2011 to 2012
Wellton-Mohawk	26,343	-6.7%
East Yuma Mesa	344,491	7.9%
South Valley	220,265	4.8%
West Yuma Valley	100,740	1.4%
West Urban	367,218	4.7%
East Urban	751,796	5.4%
Interstate	217,715	-10.0%

Source: YMPO, ADOT

Traffic volumes vary between the winter and summer months because the agricultural season peaks during the winter and because the region is host to a large number of winter visitors. As shown in **Table 6**, the summed subarea winter (i.e., February) traffic volumes are generally greater than the summed subarea summer (i.e., July) traffic volumes, particularly in the Wellton-Mohawk, East Yuma Mesa, South Valley, and East Urban subareas. No variation in Interstate volumes is shown because ADOT did not provide separate count data for winter vs. summer seasons.

Table 6 – 2012 Seasonal Traffic Volumes by Subarea

Subarea	Winter 2012	Summer 2012	Percent Change from Summer to Winter
Wellton-Mohawk	32,135	20,550	56%
East Yuma Mesa	431,146	257,837	67%
South Valley	248,420	192,109	29%
West Yuma Valley	106,163	95,318	11%
West Urban	385,028	349,408	10%
East Urban	866,761	636,831	36%
Interstate	217,715	217,715	-

Source: YMPO, ADOT

3.5 Level of Service

Level of Service (LOS) rates the level of congestion using letters A through F, similar to a school report card's grades. A volume-to-capacity ratio (v/c ratio) corresponds to each LOS letter. The v/c ratio is the ratio of the volume of traffic on a specific road segment compared to the capacity of that roadway segment. **Table 7** describes the different LOS categories and provides their corresponding v/c ratios. **Figure 15** shows photographs of what the congestion levels described by the various LOS categories look like on a typical roadway. LOS A has the least amount of traffic and no congestion. As the LOS goes from A to F, congestion increases. LOS F represents over-capacity conditions with significant congestion.



Table 7 – Levels of Service and V/C Ratios

Level of Service (LOS)	Roadway Condition	V/C Ratio Range
A	Free flow conditions; virtually no delay	< 0.50
B	In the range of stable flow, but the presence of other users in the traffic stream begins to be noticeable.	0.51-0.60
C	Still in the range of stable flow, but marks the beginning of the range in which the operation of individual users becomes significantly affected by others.	0.61-0.72
D	High-density but still stable flow. Speed and freedom to maneuver are severely restricted, and the driver or pedestrian experiences a generally poor level of comfort and convenience.	0.73-0.84
E	Represents operating conditions at or near the capacity level. All speeds are reduced to a low but relatively uniform value.	0.85-1.00
F	Traffic stream is defined as forced or breakdown flow. This condition exists wherever the amount of traffic approaching a point exceeds the amount which can traverse the point.	> 1.00

Source: Highway Capacity Manual

LOS A



LOS D



LOS B



LOS E



LOS C



LOS F



Source: Federal Highway Administration

Figure 15 – Visual Depictions of Levels of Service



LOS A through LOS D (v/c ratio < 0.85) are typically considered acceptable levels of congestion. **Table 8** shows the generalized volume thresholds at which roadways of various functional classifications and through lanes typically reach capacity (LOS F). **Table 9** similarly shows the volume thresholds that correspond to LOS E (85% of the capacity values in **Table 8**). **Figure 16** shows which roadways in the YMPO region operate at LOS E or LOS F based on the 2012 traffic volume data provided by YMPO, the aforementioned volume thresholds, and input provided by YMPO member agency staff.

Table 8 – Generalized Roadway Capacities (LOS F Volume Thresholds)

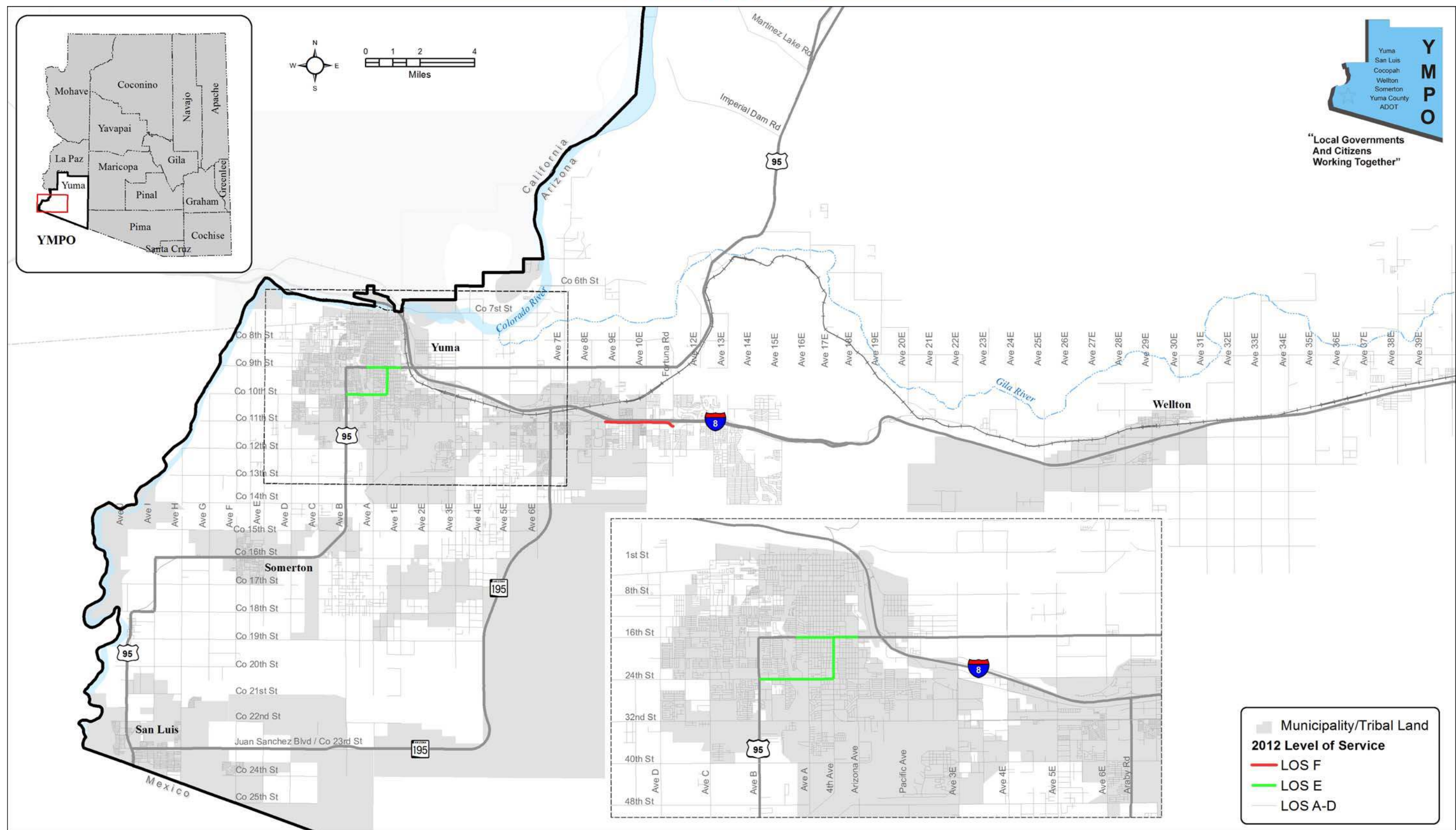
Facility Type	2-Lane	4-Lane	6-Lane
Interstate	-	75,000	115,000
Principal Arterial	-	34,500	51,800
Minor Arterial	-	32,900	49,300
Rural Major Collector	12,600	25,200	
Rural Minor Collector	12,600	-	-
Urban Collector	14,100	28,200	-

Source: YMPO RTP 2010-2033

Table 9 – LOS E Volume Thresholds

Facility Type	2-Lane	4-Lane	6-Lane
Interstate	-	63,750	97,750
Principal Arterial	-	29,325	44,030
Minor Arterial	-	27,965	41,905
Rural Major Collector	10,710	21,420	-
Rural Minor Collector	10,710	-	-
Urban Collector	11,985	23,970	-

Source: YMPO RTP 2010-2033, analysis by Kimley-Horn and Associates, Inc.



Source: ADOT, YMPO, analysis by Kimley-Horn and Associates, Inc.

Figure 16 – Roadways with LOS E or LOS F in 2012



3.6 Traffic Safety

Crash data provided by ADOT for the five-year period from January 1, 2007 to December 31, 2011 was examined to determine locations with likely traffic safety issues. There were a total of 14,314 crashes in the YMPO region during the five-year analysis period. Crash severity (degree of injury) was also examined to identify how many of the crashes resulted in injuries or fatalities. **Table 10** provides a summary of the regional crash data by injury severity. **Figure 17** shows the locations of fatal and incapacitating crashes within the focus area of the region. More detailed information on the fatal and incapacitating crashes in the regional crash dataset can be found in **Appendix A**.

Table 10 – Regional Crash Summary by Injury Severity (2007-2011)

Crash Severity	Number of Crashes (2007-2011)
Fatal	109
Incapacitating injury	493
Non-incapacitating injury	1,853
Possible injury	2,366
No injury	9,493
Total	14,314

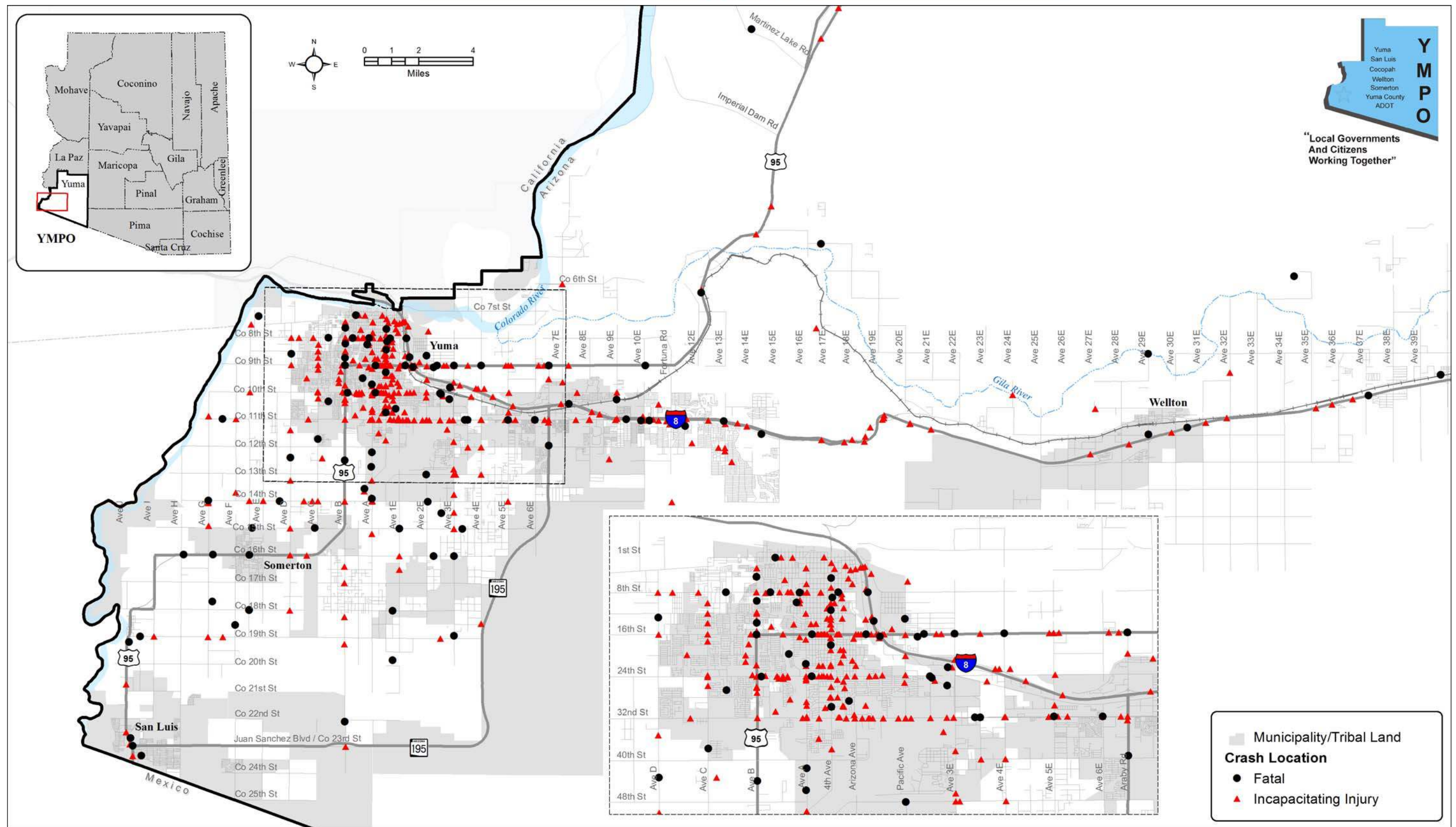
Source: ADOT, analysis by Kimley-Horn and Associates, Inc.

Table 11 provides a summary of the bicycle- and pedestrian-related crash data by injury severity. While bicycle- and pedestrian-related crashes are a small percentage of the total number of crashes in the regional crash dataset (2%), they constitute a disproportionately high percentage of fatal (23%) and incapacitating injury crashes (12%). **Figure 18** shows the locations of bicycle- and pedestrian-related crashes within the focus area of the region. More detailed information on the fatal and incapacitating bicycle- and pedestrian-related crashes can be found in **Appendix B**.

Table 11 – Bicycle and Pedestrian Crash Summary by Injury Severity (2007-2011)

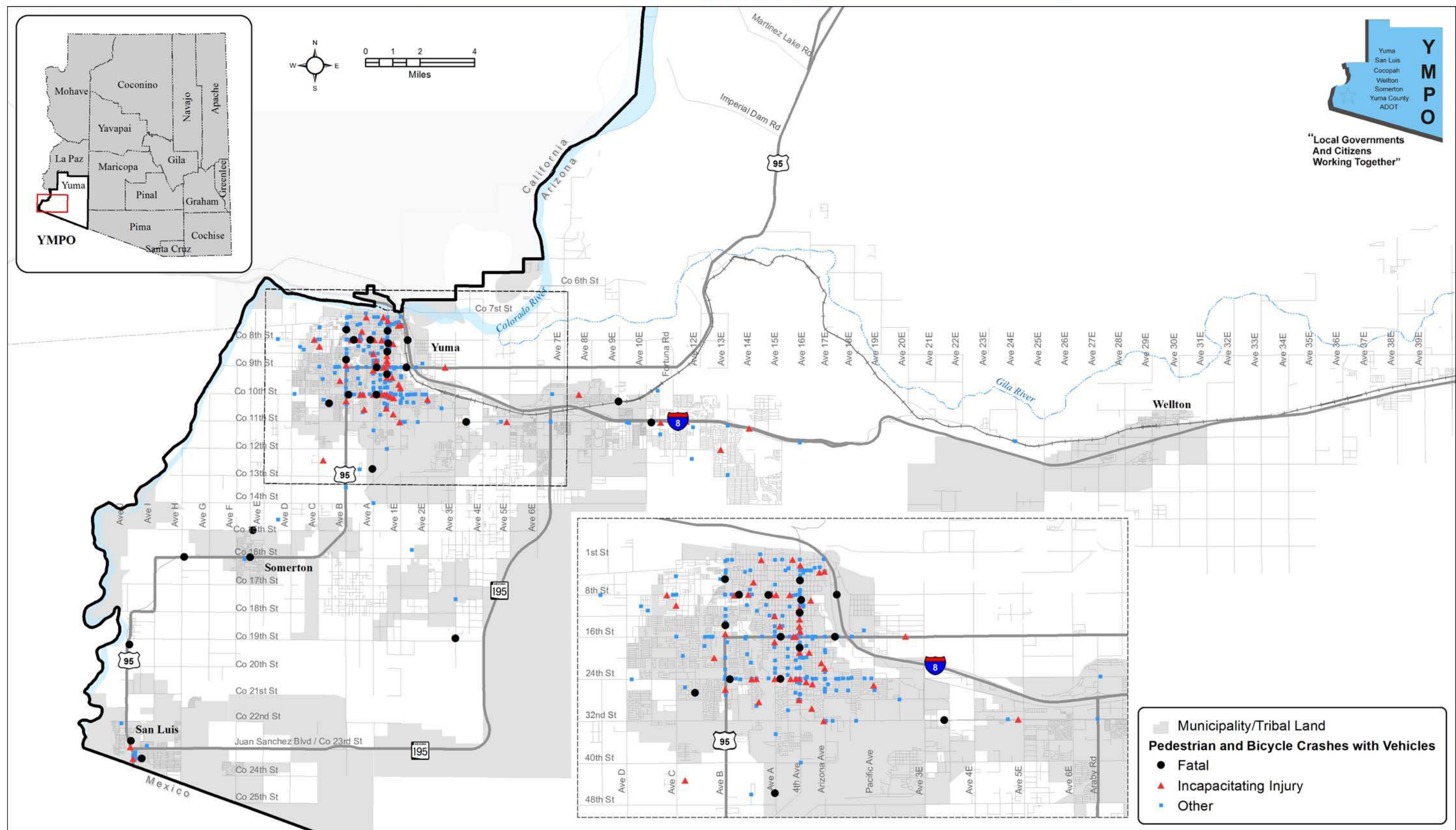
Crash Severity	Number of Crashes (2007-2011)
Fatal	25
Incapacitating injury	57
Non-incapacitating injury	144
Possible injury	74
No injury	37
Total	337

Source: ADOT, analysis by Kimley-Horn and Associates, Inc.



Source: ADOT, analysis by Kimley-Horn and Associates, Inc.

Figure 17 – Fatal and Incapacitating Crash Locations (2007-2011)



Source: ADOT, analysis by Kimley-Horn and Associates, Inc.

Figure 18 – Pedestrian and Bicycle Crash Locations (2007-2011)



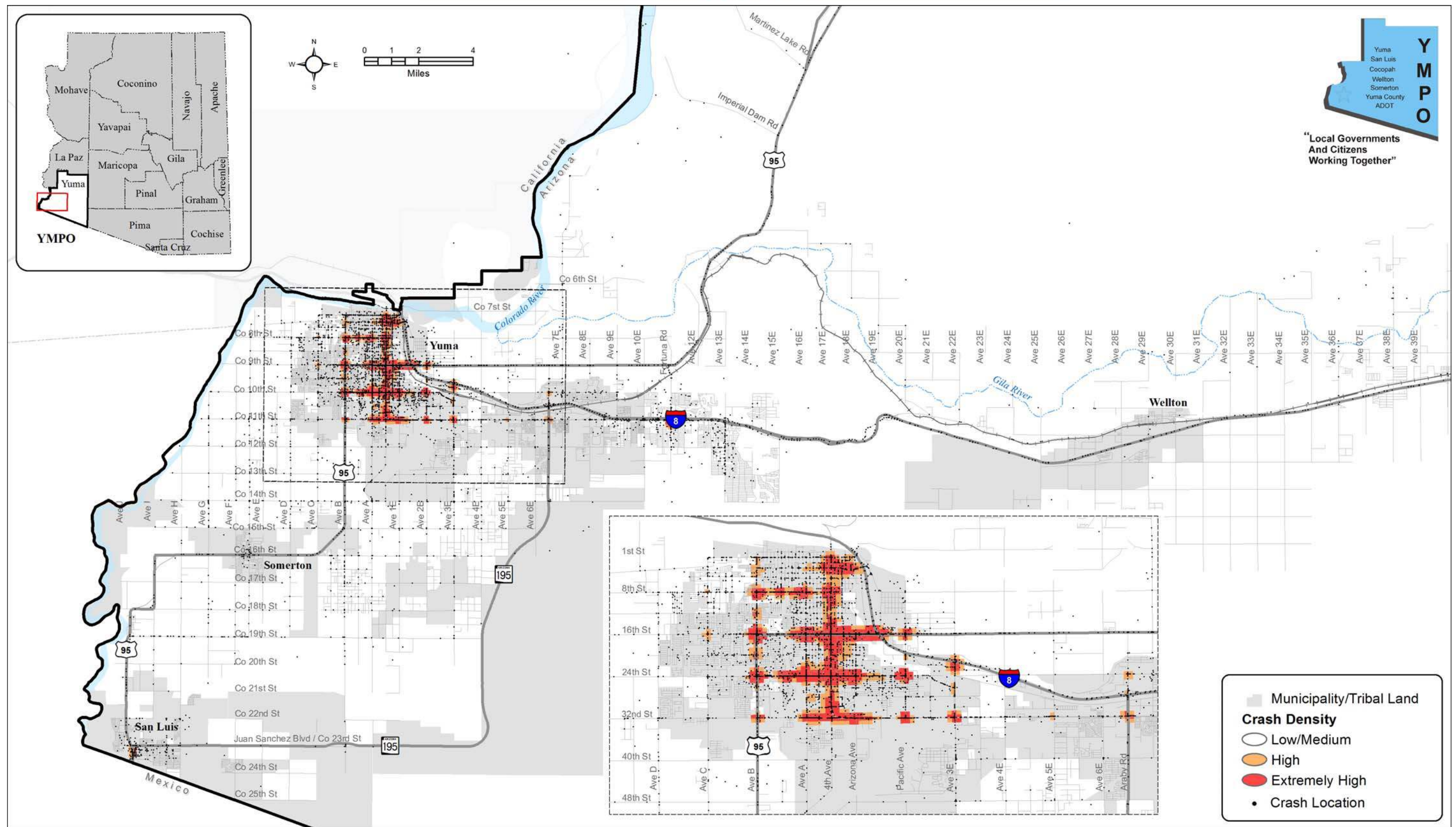
Screening the regional crash dataset for locations with traffic safety issues was accomplished using Geographic Information Systems (GIS) and a GIS-based tool known as kernel density spatial analysis. Kernel density spatial analysis was conducted by overlaying a grid on the region and then calculating the density of crashes within each cell of the grid. Areas of high density suggest that there is a likely traffic safety issue as something appears to be causing the distribution of crashes to not be random in these areas. Crash locations and densities are shown in **Figure 19**.

Crash rates were developed for the roadway segments and intersections with the highest crash densities. Crash rates were calculated utilizing traffic volume data provided by ADOT and YMPO for 2011 and 2012. The use of the 2011 and 2012 volumes assumes these volumes are similar to the average traffic volumes from 2007-2011. **Table 12** shows the crash rates for high-density crash roadway segments, with crash rates reported in crashes per million vehicle miles traveled (MVMT). **Table 13** shows the crash rates for high-density crash intersections, with crash rates reported in crashes per million entering vehicles (MEV).

Table 12 – Crash Rates for High-Density Crash Roadway Segments

Roadway	From	To	Length (miles)	Number of Crashes (2007-2011)	AADT (2007-2011)	Crash Rate (per MVMT)
3rd St	11th Ave	4th Ave	0.50	109	5,157	23.16
Fortuna Rd	0.29 miles N of I-8	0.35 miles S of I-8	0.65	189	14,241	11.19
16th St	El Paseo Real	Engler Ave	2.63	1,190	22,419	11.06
8th St	Ave B	2nd Ave	1.65	435	13,108	11.02
Ave 3E	Palo Verde St	0.12 miles N of 24th St	0.34	56	9,266	9.74
Catalina Dr	8th Ave	1st Ave	0.43	40	5,274	9.66
24th St	Camino Barranca	Mary Ave	2.15	892	25,069	9.07
Ave 3E	0.3 miles S of I-8	0.2 miles N of I-8	0.50	132	17,212	8.40
Giss Pkwy	4th Ave	Redondo Center Dr	0.66	133	13,264	8.32
4th Ave	State Line	32nd St	4.00	1,026	21,049	6.68
US 95	Juan Sanchez Blvd	A St	0.50	94	16,850	6.11
Ave B	1st St	5th St	0.46	73	15,304	5.68
32nd St	0.2 miles W of Ave A	Winsor Ave	1.79	442	24,688	5.48
1st Ave	14th St	26th St	1.48	96	9,245	3.84
Pacific Ave	I-8	0.18 miles S of I-8	0.18	35	34,418	3.10

Source: YMPO, ADOT, analysis by Kimley-Horn and Associates, Inc.



Source: ADOT, analysis by Kimley-Horn and Associates, Inc.

Figure 19 – Crash Locations and Densities (2007-2011)



Table 13 – Crash Rates for High-Density Crash Intersections

Intersection (Street 1/Street 2)	Number of Crashes within 200' (2007-2011)	AADT on Street 1 (2007-2011)	AADT on Street 2 (2007-2011)	Crash Rate (crashes per MEV)
Ave B/16th St	290	22,092	18,405	3.92
Ave B/24th St	218	21,453	18,700	2.97
24th St/Araby Rd	45	6,651	8,747	1.60
Ave B/12th St	56	18,750	1,400	1.52
Ave B/32nd St	80	15,374	13,721	1.51
32nd St/Araby Rd	76	27,271	3,055	1.37
24th St/Ave 2E	114	15,264	32,109	1.32
Ave B/20th St	70	25,433	5,111	1.26
32nd St/Ave 3E	94	29,595	14,316	1.17
16th St/Ave C	42	12,719	10,997	0.97
Ave C/County 8th St	28	6,580	10,643	0.89
32nd St/Pacific Ave	95	33,091	29,800	0.83
32nd St/Ave 5E	38	31,970	4,376	0.57

Source: YMPO, ADOT, analysis by Kimley-Horn and Associates, Inc.

3.7 Bridge Inventory

The ADOT bridge program addresses systematic preventative maintenance and provides funding assistance for bridges in Arizona. At least 15 percent of ADOT's bridge funds must be spent on bridges on public roads that are not federal-aid highways. Per the *ADOT 2004 Local Government Projects Manual*, "to qualify for funds, a bridge must be included in the ADOT Statewide Inventory of Bridges and be inspected on a regular interval either by ADOT or the local jurisdiction. Bridges with a sufficiency rating below 50 and structurally deficient or functionally obsolete are considered for replacement funds. Bridges with a sufficiency rating between 50 and 80 are eligible for rehabilitation funds. Replacement of bridges rated greater than 50 may be eligible if rehabilitation alternatives are not feasible and/or rehabilitation would not remove all the deficiencies".

Appendix C shows the Arizona State Highway System bridge facilities in the YMPO region per the ADOT Statewide Inventory of Bridges (www.azdot.gov/Highways/bridge/BridgeInventory/index.asp). **Appendix D** shows the local government bridge facilities in the YMPO region per the ADOT Statewide Inventory of Bridges. Bridges are marked with an "S" if they are considered structurally deficient or an "F" if they are considered functionally obsolete in the next-to-last column of the tables in **Appendix C** and **Appendix D**.



3.8 Programmed Roadway Projects to Add Through Lanes

The YMPO regional travel demand model calculates roadway segment capacities based on the functional classification, number of through lanes of roadway segments, and other factors. For purposes of ensuring the model correctly represents roadway segments under construction or soon to be under construction where the number of through lanes will change, programming documents from the YMPO member agencies were reviewed.

There are several programmed roadway improvement projects that will add through lanes in the *YMPO 2011-2016 Transportation Improvement Program*, *ADOT 2013-2017 Five-Year Construction Program*, *Yuma County Capital Improvement Plan (FY 2013-2017)*, and the *City of Yuma Capital Improvement Program FY 2013-2017*. No programmed locally-funded roadway improvement projects that will add through lanes were identified for the cities of Somerton and San Luis, the Town of Wellton, and the Cocopah Indian Tribe.

Funding has been committed and construction has already commenced or is anticipated to start no later than 2017 for the following projects:

- ***Avenue 3E – Gila Ridge Rd. to 24th Street:*** widen from 2 to 6 through lanes
- ***Avenue 3E – I-8 to US 95:*** widen from 2 to 4 through lanes
- ***16th Street & 4th Avenue Intersection:*** widen intersection from 4 to 6 through lanes on all approaches
- ***24th Street – Avenue B to Avenue C:*** widen from 2 to 4 through lanes
- ***28th Street – Avenue B to Avenue C:*** widen from 2 to 4 through lanes
- ***32nd Street & Avenue B Intersection:*** widen intersection from 2 or 4 to 6 through lanes on all approaches
- ***Avenue E – County 25th Street to SR 195:*** widen from 2 to 4 through lanes
- ***Juan Sanchez Boulevard – US 95 to Avenue E-1/2:*** widen from 2 to 4 through lanes
- ***San Luis Improvement Project – Downtown San Luis:*** convert from 2-way road with 4 through lanes to two 1-way roads with 2 through lanes each
- ***County 8th Street – Avenue C to Avenue D:*** widen from 2 to 4 through lanes
- ***County 12th Street – Avenue 12E to Foothills Boulevard:*** widen from 2 to 4 through lanes

4 BICYCLE NETWORK

Bicycle facilities are an important part of the regional transportation system in that they provide a non-motorized option for travel. At the national level, there is emphasis on providing more bicycle facilities along roadways to create “complete streets”. Complete streets are designed to function for all users to safely and effectively move along and across a complete street (see www.completestreets.org).

4.1 Existing Bicycle Facilities

There are currently 44 miles of bicycle facilities in the City of Yuma. Per the City’s *Bicycle Facilities Master Plan*, these facilities are comprised of bike routes, lanes, and paths, as well as multi-use paths, as summarized in **Table 14**. Bike routes consist of roadways that contain signage designating the roadways as bike routes. Bike lanes consist of a portion of a roadway cross-section (typically 5-6 feet) that has been striped, signed, or marked for preferential or exclusive use by bicyclists. Bike paths consist of paths designated for bicyclists that are physically separated from motorized vehicles by open space or a barrier. Multi-use paths are similar to bike paths except that they are also for use by other non-motorized travelers such as pedestrians.



Bike Lane on 5th Avenue in Yuma

The standard width of bike paths is 10 feet and of multi-use paths is 12-14 feet. Bike paths are typically paved while multi-use paths are typically not paved. The *Yuma General Plan* includes goals and policies that promote the continued development of the City’s bicycle network and the construction of bicycle crossings and bicycle stations.

Table 14 – Bicycle Facilities in the City of Yuma

Bicycle Facility Type	Miles
Bike Route	16.43
Bike Lane	12.40
Bike Path	13.63
Multi-Use Path	1.58
Total Miles	44.04

Source: City of Yuma

While there are no existing designated bicycle facilities in San Luis, bicycle use is common in San Luis. Bicycles serve as the main mode of transportation for many residents going to and coming from work, school or other activities. Many non-residents that cross the international border on a daily basis, such as farm workers, use bicycles to travel across the border. Because there are no designated bike parking or storage facilities, bicyclists must leave their bicycles in various locations and then retrieve them when



they are ready to make their return trip. The San Luis *General Plan* includes policies that promote the construction of bicycle facilities and routes on new collectors or arterials.

According to the *Somerton Comprehensive Transportation Plan*, there are three existing multi-use path segments in Somerton – two on Main Street and one on County 16½ Street with several new multi-use paths under design or scheduled for construction in the near future. The *Somerton Shared Use Pathway and Trails System Masterplan* includes plans for additional multi-use paths. The *Somerton General Plan* includes policies that promote the construction of bicycle facilities and routes on new collectors or arterials.

Wellton does not have any existing designated bicycle facilities, but there are paved shoulders on Old Highway 80 through downtown Wellton that can be utilized by bicyclists. The Town of Wellton has developed bicycle facility improvement project recommendations and “complete streets” cross-sections that include a multi-use lane intended for bicycles and golf carts as part of the *Wellton Transportation Long Range Plan PARA Study*.

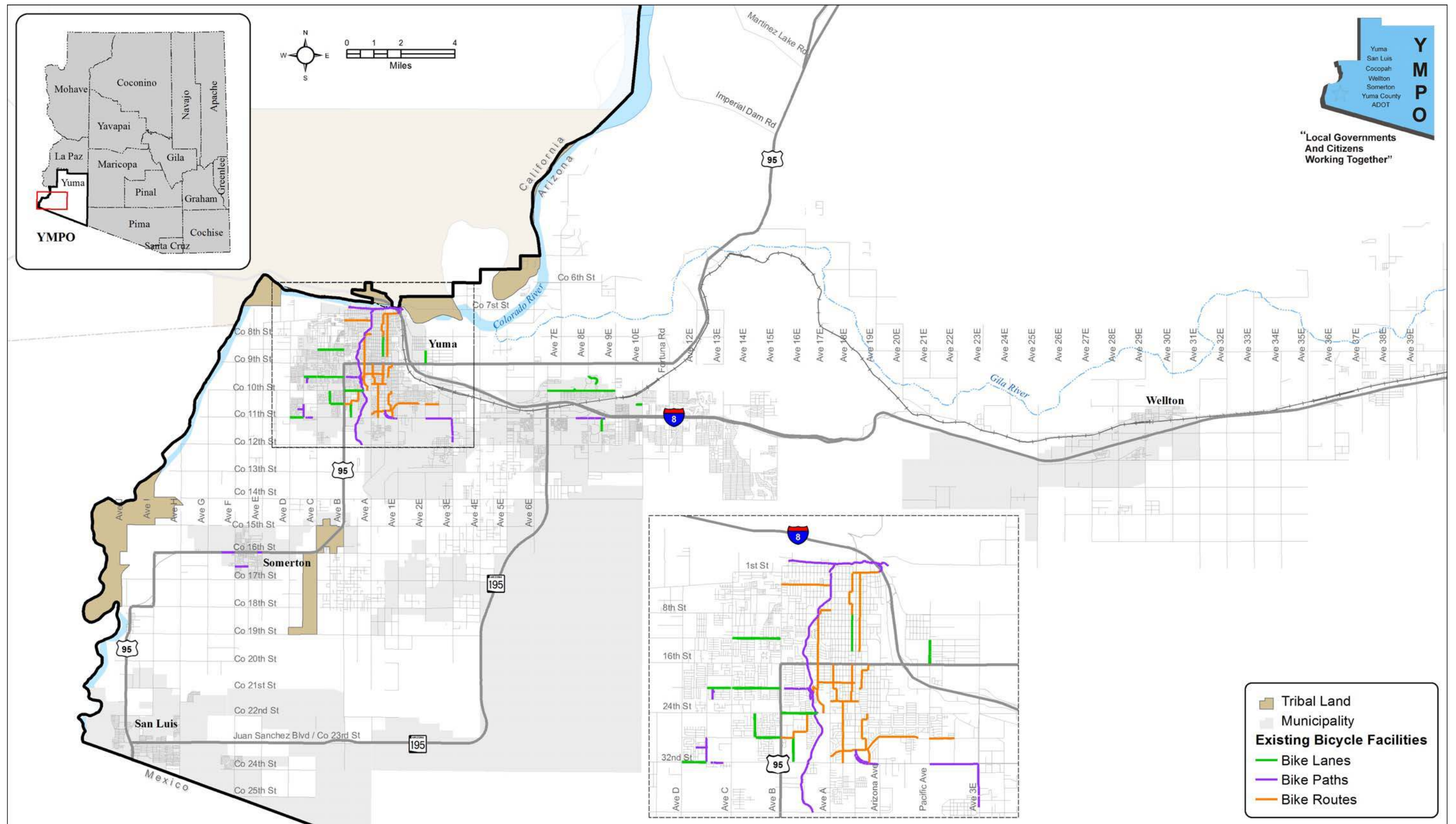
No existing or planned designated bicycle facilities were identified in the Cocopah Indian Reservation, unincorporated Yuma County, or Winterhaven.

Designated bicycle facilities in the region are shown in **Figure 20**. The existing regional bicycle network has many gaps and discontinuities. There are few bicycle amenities such as bike racks or bike lockers in the region, although transit buses are equipped with bicycle racks and riders can be brought on the bus at the bus operator’s discretion.

4.2 Programmed Bicycle Network Improvement Projects

There are several programmed bicycle network improvement projects in the *YMPO 2011-2016 Transportation Improvement Program* and the *City of Yuma Capital Improvement Plan FY 2013-2017*. Funding has been committed and construction has already commenced or is anticipated to start no later than 2017 for the following projects:

- **Avenue 3E – Gila Ridge Rd. to 32nd Street:** add bike lanes
- **Avenue 3E – I-8 to US 95:** add bike lanes
- **16th Street & 4th Avenue Intersection:** add bike lanes
- **24th Street – Avenue B to Avenue C:** add bike lanes
- **28th Street – Avenue B to Avenue C:** add bike lanes
- **32nd Street & Avenue B Intersection:** add bike lanes
- **Giss Parkway and I-8 Westbound Ramps:** add bike lanes
- **4th Avenue – 32nd Street to 40th Street:** add bike lanes
- **Avenue E – County 25th Street to SR 195:** add bike lanes
- **Juan Sanchez Boulevard – US 95 to Avenue E-1/2:** add bike lanes
- **San Luis Improvement Project – Downtown San Luis:** add bike lanes
- **Catalina Drive – 32nd Street to 4th Avenue:** add bike routes
- **Avenue A Multi-Use Pathway:** improve and extend multi-use path
- **West Main Canal Multi-use Path:** construct new multi-use path
- **Expansion of Yuma’s Multi-Use Pathway System:** extend multi-use path
- **Fourth Avenue Gateway:** construct multi-use path
- **Wellton Coyote Wash Multi-Use Path – Los Angeles Avenue:** construct multi-use path
- **Somerton Canal Multi-Use Pathway:** construct multi-use path
- **Somerton Cesar Chavez Avenue Multi-Use Pathway:** construct multi-use path



Source: YMPO, City of Yuma, City of Somerton

Figure 20 – Existing Bicycle Facilities in the YMPO Region

5 PEDESTRIAN NETWORK

Pedestrian facilities (e.g., sidewalks, trails, and multi-use paths) are an important part of the regional transportation system in that they provide a non-motorized option for travel. At the national level, there is emphasis on complying with the Americans with Disabilities Act (ADA) and providing more pedestrian facilities along roadways to create “complete streets”. Complete streets are designed to function for all users to safely and effectively move along and across a complete street (see www.completestreets.org).

5.1 Existing Sidewalks

The existing sidewalk network is fairly well developed in the more urbanized parts of the region, but there are still many gaps and discontinuities. In rural areas, sidewalks generally do not exist. Most of the sidewalks and sidewalk ramps are accessible by pedestrians with disabilities, particularly those facilities constructed since the passage of ADA in 1990.

The City of Yuma *General Plan* indicates that future improvements to major streets need to include sidewalk on both sides of the street and that the City should complete an inventory of roadways lacking pedestrian facilities to develop and implement pedestrian improvements.



Sidewalk in San Luis near San Luis I POE

Over two million pedestrians annually cross the U.S./Mexico border at San Luis I POE, giving the downtown area of the City of San Luis the highest level of pedestrian activity in the region. San Luis has a developed network of sidewalks

in the downtown area and in the residential area to the east but lacks sidewalk connectivity to activity centers outside of these two areas. The San Luis *General Plan* includes policies that promote the installation of new pedestrian facilities such as sidewalks, overpasses, pedestrian signals at major intersections, improved curb cuts at cross-walks, and pedestrian refugee areas.

Sidewalks exist along most roadways in the developed portions of the City of Somerton. Per the Somerton *General Plan*, all new road construction within the City is required to provide sidewalks and ADA-accessible ramps. The City also has a retrofit program in place to gradually install sidewalks on all the older roadways within the City.

Wellton has sidewalks along only a few of its roadway segments. The Town has identified a need for pedestrian facilities such as sidewalks that connect activity centers. The Town of Wellton has developed pedestrian facility improvement project recommendations and “complete streets” cross-sections that include sidewalks as part of the *Wellton Transportation Long Range Plan PARA Study*.

There are very few existing or planned sidewalks in the Cocopah Indian Reservation, unincorporated Yuma County, or Winterhaven. Yuma County does, however, now have subdivision regulations that require sidewalks in all new developments. The Cocopah Indian Tribe has indicated it would like to see more sidewalks implemented to encourage more physical activity and provide a safer traveling environment for pedestrians.

5.2 Existing Trails and Paths

While trails and paths can be used as connecting routes to other transportation facilities, they are most often used for recreational purposes. Trails generally are not paved while paths generally are paved. Trails and paths are typically multi-use, meaning they are open to various non-motorized travelers such as pedestrians, hikers, bicyclists, and equestrians. Existing trails and paths in the YMPO region are generally located along canals or rivers or in hilly areas. The locations of the existing trails and paths generally align with the aforementioned bicycle paths (see **Figure 20**).



Multi-use path adjacent to canal in Yuma

5.3 Programmed Pedestrian Network Improvement Projects

There are several programmed pedestrian network improvement projects in the *YMPO 2011-2016 Transportation Improvement Program* and the *City of Yuma Capital Improvement Plan FY 2013-2017*. Most of these projects are multi-use path projects or roadway projects that include additional sidewalk segments or enhancements to existing sidewalk segments. Funding has been committed and construction has already commenced or is anticipated to start no later than 2017 for the following projects:

- ***Sidewalk Infill – 5th Street, Avenue A, and 22nd Street:*** add sidewalks
- ***Avenue 3E – Gila Ridge Rd. to 32nd Street:*** add sidewalks
- ***Avenue 3E – I-8 to US 95:*** add sidewalks
- ***24th Street – Avenue B to Avenue C:*** add sidewalks
- ***28th Street – Avenue B to Avenue C:*** add sidewalks
- ***Giss Parkway and I-8 Westbound Ramps:*** add sidewalks
- ***4th Avenue – 32nd Street to 40th Street:*** add sidewalks
- ***Juan Sanchez Boulevard – US 95 to Avenue E-1/2:*** add sidewalks
- ***San Luis Improvement Project – Downtown San Luis:*** enhance sidewalks
- ***Avenue A Multi-Use Pathway:*** improve and extend multi-use path
- ***West Main Canal Multi-use Path:*** construct new multi-use path
- ***Expansion of Yuma’s Multi-Use Pathway System:*** extending multi-use path
- ***Fourth Avenue Gateway:*** construct multi-use path
- ***Wellton Coyote Wash Multi-Use Path – Los Angeles Avenue:*** construct multi-use path
- ***Somerton Canal Multi-Use Pathway:*** construct multi-use path
- ***Somerton Main Street – Somerton Avenue to Bingham Avenue:*** enhance sidewalks
- ***Somerton Cesar Chavez Multi-Use Pathway:*** construct multi-use path
- ***North and South I-8 Frontage Road – Avenue 10E to Avenue 11E:*** add sidewalks



6 TRANSIT NETWORK

The Yuma County Intergovernmental Public Transportation Authority (YCIPTA) provides Yuma County Area Transit (YCAT) fixed route and YCAT demand-responsive bus service throughout the YMPO region, including the cities of Yuma, San Luis, and Somerton, Town of Wellton, Cocopah Indian Reservation, Winterhaven, Fort Yuma-Quechan Indian Reservation, and the unincorporated communities of Gadsden, Fortuna Foothills and Ligurta. YCIPTA was formed on December 13, 2010 by the Yuma County Board of Supervisors to administer, plan, operate and maintain public transit services throughout Yuma County. Previously, the regional transit system was owned and operated by YMPO. A resolution was passed by the YMPO Executive Board in August of 2011 with the intent of transitioning transit operations to YCIPTA. The power was officially transferred to YCIPTA in July of 2012.

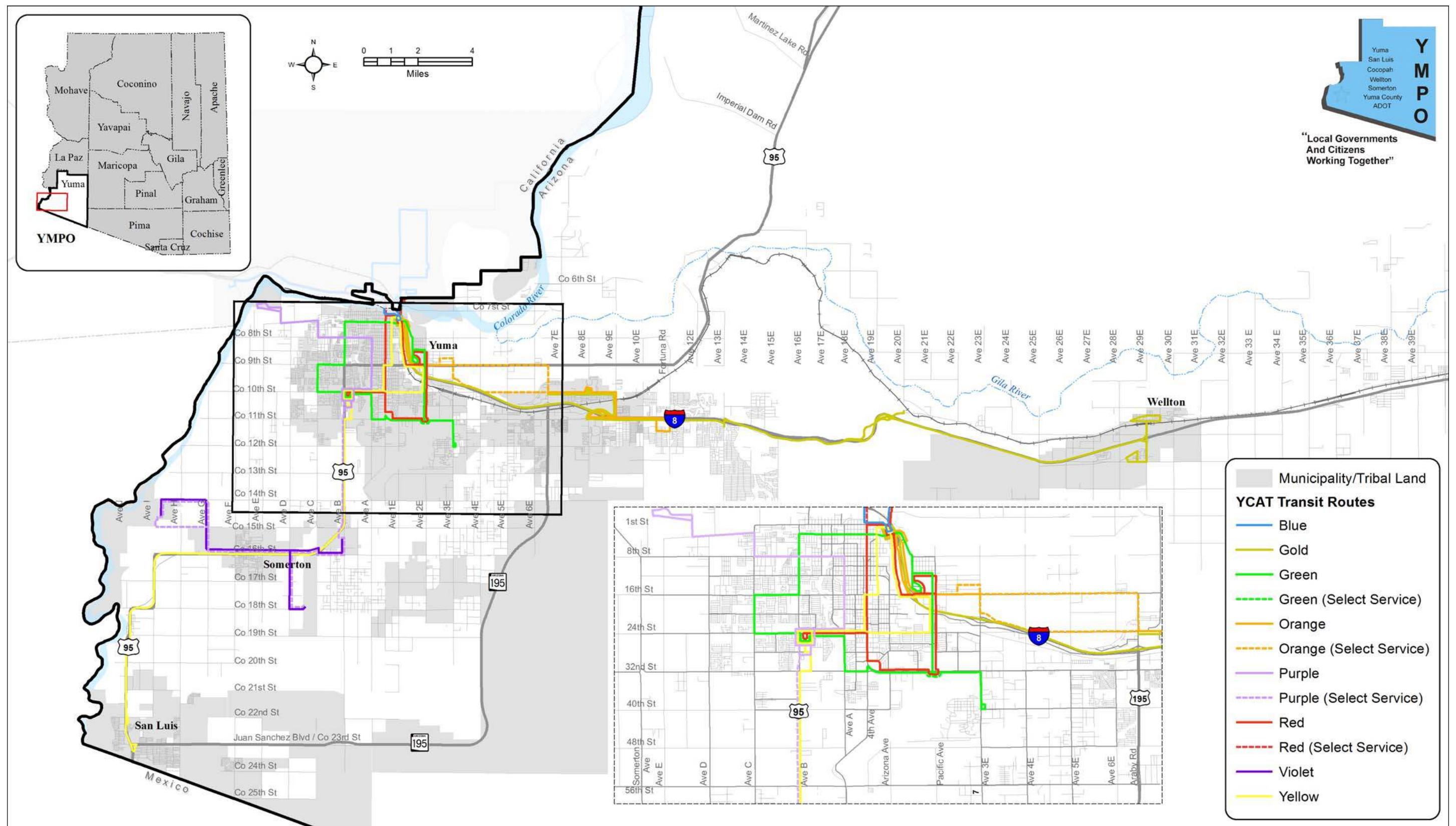
6.1 Existing Transit Routes

There are nine existing transit routes, as shown in **Figure 21**. General transit service hours are Monday through Friday from 5:50am to 7:30pm and on Saturday between 9:15am and 6:30pm. Headways are generally one hour. Basic one-way fares are \$2.00 per trip with discounted fares available. A new winter 2012 upgrade to the YCAT system is the use of YCATPass cards as valid fare. Passengers can purchase YCATPass cards at the YCAT Bus Facility and can load "electronic cash" (e-cash) for immediate use on YCAT buses. The card will also recognize 10-ride, 31-day and day passes. Seniors and students can purchase a special discounted YCATPass. The nine available YCIPTA routes are named by different colors and numbers as follows:



YCAT bus

- *Red Route 1* is a fixed route that runs primarily on 4th Avenue, 32nd Street, Pacific Avenue, and Redondo Center Drive, connecting points of interest such as the Downtown Yuma Transit Center, Southgate Mall, Yuma International Airport, Yuma Palms Regional Center, and Paradise Casino.
- *Orange Route 2* is a fixed route that serves the portion of Yuma north of I-8 as well as the Fortuna Foothills, connecting points of interest such as the Downtown Yuma Transit Center, Yuma Palms Regional Center, Arizona Western College/Northern Arizona University/University of Arizona (AWC/NAU/UA), Walmart, and Foothills Plaza.
- *Green Route 4* is a fixed route that generally serves the portion of Yuma bounded by Pacific Avenue, 32nd Street, Avenue B, and 3rd Street/Giss Parkway, connecting points of interest such as the Downtown Yuma Transit Center, Yuma Palms Regional Center, Yuma International Airport, MCAS, Southgate Mall, Yuma Regional Medical Center, West Yuma Transfer Hub, and Walmart.



Source: YCIPTA

Figure 21 – Existing YMPO Region Transit Routes



- *Blue Route 5* is a fixed route that generally serves Winterhaven and the Fort Yuma-Quechan Indian Reservation, connecting points of interest such as the Downtown Yuma Transit Center, Quechan Resort Casino, Winterhaven Post Office, Quechan Community Center, and Paradise Casino.
- *Purple Route 6/6A* is a flex route that generally serves the North, West, and East Cocopah Reservations and Somerton, connecting points of interest such as the Cocopah RV Resort, West Yuma Transfer Hub, Walmart, Cocopah Casino, Somerton City Hall, and Cocopah Tribe Administration Office. Route deviation services are provided with advance notice within a 0.75-mile radius on either side of the route.
- *Violet Route 7* is a flex route that generally serves the West and East Cocopah Reservations and Somerton, connecting points of interest such as the Cocopah Casino, Somerton City Hall, and Cocopah Tribe Administration Office. Route deviation services are provided with advance notice within a 0.75-mile radius on either side of the route.
- *Gold Route 8* is a flex route that runs primarily on I-8 and serves Wellton, Ligturta, and Fortuna Foothills, connecting points of interest such as the Downtown Yuma Transit Center, AWC/NAU/UA, Walmart, Foothills Plaza, Ligturta Station, and Wellton Town Hall. Route deviation services are provided with advance notice within a 1.5-mile radius on either side of the route.
- *Silver Route 9* is a fixed route that runs primarily on SR 195, connecting downtown San Luis with AWC/NAU/UA.
- *Yellow Route 95* is a fixed route that runs primarily on US 95 with a loop in central Yuma. Yellow Route 95 serves San Luis, Gadsden, Somerton, and Yuma, connecting points of interest such as downtown San Luis, downtown Somerton, Cocopah Casino, West Yuma Transfer Hub, Yuma Regional Medical Center, downtown Yuma, and Yuma Palms Regional Center.

6.2 Existing Transit Transfer Hubs

There are two primary existing transit transfer hubs where transit riders can transfer from one route to several other routes:

- The Downtown Yuma Transit Center is located at the old Hotel Del Sol at the corner of 3rd Street and Gila Street in downtown Yuma. This transfer hub was recently established due to the closure of the transfer hub at the Yuma Palms Regional Center. Six of the existing routes go through the Downtown Yuma Transit Center.
- The West Yuma Transfer Hub is located at Avenue B and 24th Street near Walmart. Six of the existing routes go through the West Yuma Transfer Hub.

There are also secondary transit transfer hubs where transit riders can transfer to one or two other routes at AWC/NAU/UA, Paradise Casino, Winterhaven, Cocopah Casino, and Main Street at C Street in downtown San Luis.

6.3 Special Transit Services

YCAT operates the NightCAT and HolidayCAT flexible demand-responsive services when AWC/NAU/UA is in session, departing the bus stop on campus at 8:10 p.m. and 10:10 p.m. Passengers tell the bus operator where they need to go and the bus will drop them off at the nearest YCAT bus stop to the passengers' home. The service area is generally within a 0.75-mile radius of existing YCAT routes.



6.4 Paratransit Services

YCAT OnCall is a dial-a-ride (DAR) demand-responsive service that provides door-to-door transportation for individuals who, because of a disability, are not able to utilize a regularly scheduled fixed route bus service. The service area for YCAT OnCall service is within a 0.75-mile radius of YCAT bus routes operating during the time of request.

Individuals that need assistance but are not eligible for YCAT OnCall/DAR can contact Saguaro Transportation Service, which operates a specialized transportation program available for those that are senior (age 60 years old and older), have a disability, or live outside the YCAT OnCall/DAR service area.

6.5 Ridership and Operating Costs

Total passenger trips on the fixed route bus system were 286,701 for fiscal year 2011-2012, with one route – Yellow 95 – accounting for over half of the total passenger trips (155,962). Total passenger trips on the OnCall/DAR demand-responsive service were 14,307 for fiscal year 2011-2012. The total operating cost for all routes combined in fiscal year 2011-2012 was \$1,648, 859, with a farebox recovery ratio of 19 percent. Funding for YCAT comes from a combination of federal and local funding sources.

6.6 Upcoming Changes to Transit Routes

On January 14, 2013, there will be some minor adjustments to the existing transit routes and schedules. Three new transit routes will also start operating at that time. The three new routes are described below:

- *Brown Route 3* will operate in the Fortuna Foothills as a checkpoint deviation service, Monday through Saturday, with connections to Orange Route 2 at AWC/NAU/UA.
- *Turquoise Route 10* will operate on Monday, Wednesday and Saturday from Paradise Casino, through downtown Yuma, Winterhaven and the Quechan Casino Resort to El Centro, California.
- *WelltonCAT* will operate one day a week service within the Town of Wellton for local intracity trips during a four hour period.

6.7 Hotel Del Sol Multimodal Transportation Center

As was previously mentioned, the Yuma Palms Regional Center transfer hub was recently relocated to the old Hotel Del Sol at the corner of 3rd Street and Gila Street. Per the recommendation of the *Yuma Multimodal Transportation Center Study* in July 2000, the currently vacant Hotel Del Sol is planned to be renovated and turned into a Multimodal Transportation Center (MMTC). The goal of the MMTC is to integrate Amtrak's cross-country rail services, Greyhound's regional intercity bus lines, and YCAT's local bus services at one location, providing opportunities to transfer between transportation modes. The redevelopment of the Hotel Del Sol as the MMTC also fits into the City of Yuma's goal to redevelop the north end of Yuma to preserve its history and culture and meet its transportation needs.

6.8 Programmed Transit Network Improvement Projects

The YCIPTA *Ten-Year Capital Plan* includes the following improvements:

- Bus purchases
- Support vehicle replacements
- Radios for YCIPTA transit fleet



- Computers for staff
- Electronic fareboxes
- Smart card accessories /card machine
- Replacement for bike racks
- Bus shelters and relocation of bus shelters
- Purchasing of signs, information posts, poles, benches, trash cans and other passenger enhancements
- Improve sidewalk access at transfer hub
- Construct bus bays/turnouts throughout Yuma County at locations to be determined
- In conjunction with the City of Yuma, renovate the Hotel Del Sol to function as a transit center with parking, Amtrak connection, buses, taxis, and car-sharing
- In conjunction with Yuma County, construct a park-and-ride lot at the County Sheriff's Station in the Foothills
- Construct a portable wash facility at the bus facility
- Develop and construct a bus maintenance facility

6.9 Transit-Dedicated Sales Tax

A potential future funding source for the transit network is the establishment of a transit-dedicated sales tax in Yuma County. Such a tax collection would need to be approved by voters. Based on the *Yuma Regional Transit Study*, a sales tax of 1/10 of a percent (0.10%) is projected to raise an estimated \$2.24 million of revenue. It is anticipated that a transit-dedicated tax could be implemented as soon as the beginning of fiscal year 2014-2015, assuming it is approved by voters in November 2014.



7 FREIGHT NETWORK

The YMPO region's existing freight network consists of infrastructure that supports the movement of goods and services via rail or truck. This freight network is supplemented by air cargo services provided at the Yuma International Airport. The regional transportation system is integral to the movement of freight, particularly truck freight. Understanding freight movement in the region helps identify where and what kinds of potential improvements to the regional transportation network may be needed.

7.1 Rail Freight

The Union Pacific Railroad (UPRR) handles all existing rail freight operations in the YMPO region. The YMPO region is situated along UPRR's primary east-west freight corridor known as the Sunset Corridor. The Sunset Corridor connects Los Angeles, California and El Paso, Texas and generally follows the Gila River and Colorado River alignments in the YMPO region. The Sunset Corridor is a very heavily used rail line, carrying up to 70 trains per day.

Data on rail freight obtained from the YMPO *Yuma County Rail Corridor Study* indicates that existing rail traffic to and from the YMPO region consists primarily of agricultural products and inputs, as well as various other products such as chemicals. Rail freight data in and out of the YMPO region is summarized in **Table 15**. The sources of the most common commodities brought into the YMPO region via rail are the Midwest (cereal grains) and the South (fertilizers and basic chemicals).

Table 15 – 2010 YMPO Region Rail Tonnage by Commodity

Originating In YMPO Region		Terminating in YMPO Region	
Commodity	Tons	Commodity	Tons
Animal feed	13,000	Cereal grains	212,000
Paper articles	1,000	Fertilizers	79,000
Other	0	Basic chemicals	35,000
		Milled grain prods.	26,000
		Newsprint/paper	17,000
		Other	46,000
Total	14,000	Total	415,000

Source: YMPO Yuma County Rail Corridor Study

7.2 Truck Freight

According to the *Yuma County Rail Corridor Study*, three geographic areas constitute 83 percent of the origins/destinations for trucks in the YMPO region in 2012: parts of Arizona not within the Phoenix or Tucson metropolitan areas (32% of total), the Los Angeles metropolitan area (31%), and the Phoenix metropolitan area (20%). The highest tonnage products that are shipped to and from the YMPO region by truck are building materials (such as gravel and nonmetallic mineral products), agricultural products, and food products. Truck freight data in and out of the YMPO region is summarized in **Table 16**.



Table 16 – 2012 YMPO Region Truck Tonnage by Commodity

Originating In YMPO Region		Terminating in YMPO Region	
Commodity	Tons	Commodity	Tons
Gravel	2,357,046	Nonmetal mineral products	1,408,940
Other agricultural products	1,499,843	Gravel	1,061,559
Nonmetal mineral products	1,464,213	Gasoline	772,343
Nonmetallic minerals	922,178	Waste/scrap	508,510
Waste/scrap	866,057	Other agricultural products	473,269
Base metals	590,390	Mixed freight	434,422
Animal feed	435,982	Paper articles	386,353
Building stone	410,032	Nonmetallic minerals	362,293
Newsprint/paper	368,200	Other foodstuffs	330,931
Cereal grains	303,872	Meat/seafood	256,725
Other	2,406,217	Other	3,003,386
Total	11,624,030	Total	8,998,731

Source: YMPO Yuma County Rail Corridor Study

Truck freight crossing the border between the U.S. and Mexico goes through the commercial POE in San Luis (known as San Luis II POE). Per the *Yuma County Rail Corridor Study*, the Phoenix and Tucson metropolitan areas comprise approximately 57 percent of the origins of exports to Mexico and 56 percent of the destinations of imports from Mexico. The largest tonnage of commodities that are imported by truck through San Luis are agricultural products, and electronics, while the largest tonnage of exported commodities are live animals and transportation equipment. Truck freight data in and out of the San Luis II POE is summarized in **Table 17**.

Most of the freight tonnage moved by truck in the YMPO region is domestic interstate trade as opposed to international trade. Truck volumes between the YMPO region and Mexico constitute a small percentage of the total truck volumes in and out of the YMPO region. According to the *Binational San Luis Transportation Study*, San Luis II POE processed an average of 95 trucks per day in fiscal year 2011.

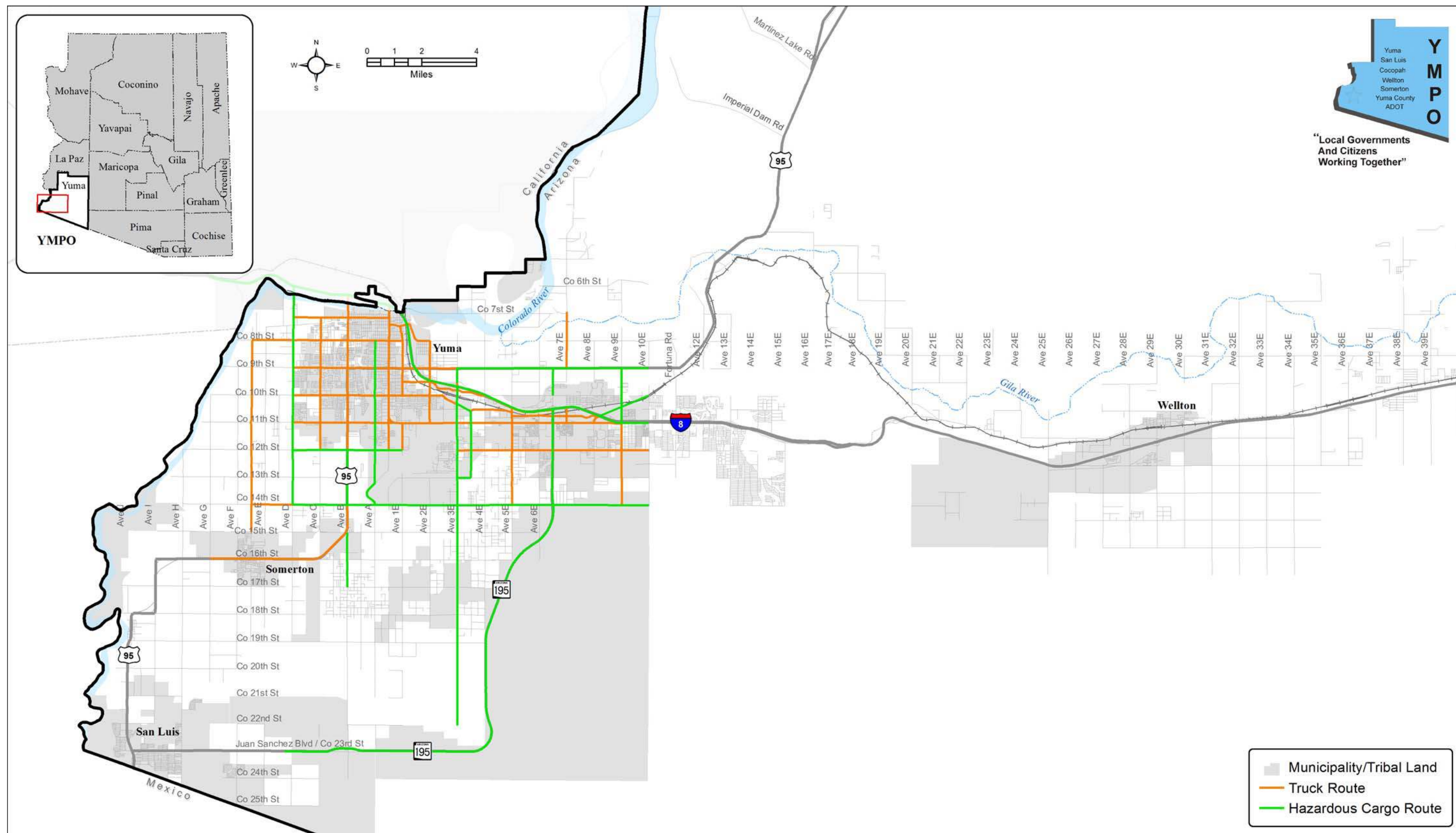
The City of Yuma is the only YMPO member agency that has officially designated truck routes and hazardous cargo routes in the YMPO region. The currently designated truck routes and hazardous cargo routes within the region are shown in **Figure 22**. YMPO member agencies are currently in the process of designating overweight truck routes within their respective jurisdictions.



Table 17 – 2012 Mexican Imports/Exports at San Luis by Commodity

Imports		Exports	
<i>Commodity</i>	<i>Tons</i>	<i>Commodity</i>	<i>Tons</i>
Other agricultural products	977,355	Live animals/fish	130,884
Electronics	78,926	Transport equipment	112,430
Machinery	51,514	Newsprint/paper	96,573
Live animals/fish	38,734	Tobacco prods.	78,135
Base metals	28,431	Building stone	70,748
Other foodstuffs	21,319	Natural sands	36,387
Textiles/leather	19,213	Gravel	35,528
Plastics/rubber	18,873	Coal	29,287
Nonmetal mineral products	17,139	Crude petroleum	26,870
Articles-base metal	15,766	Gasoline	23,452
Other	79,406	Other	99,223
Total	1,346,676	Total	739,517

Source: YMPO Yuma County Rail Corridor Study

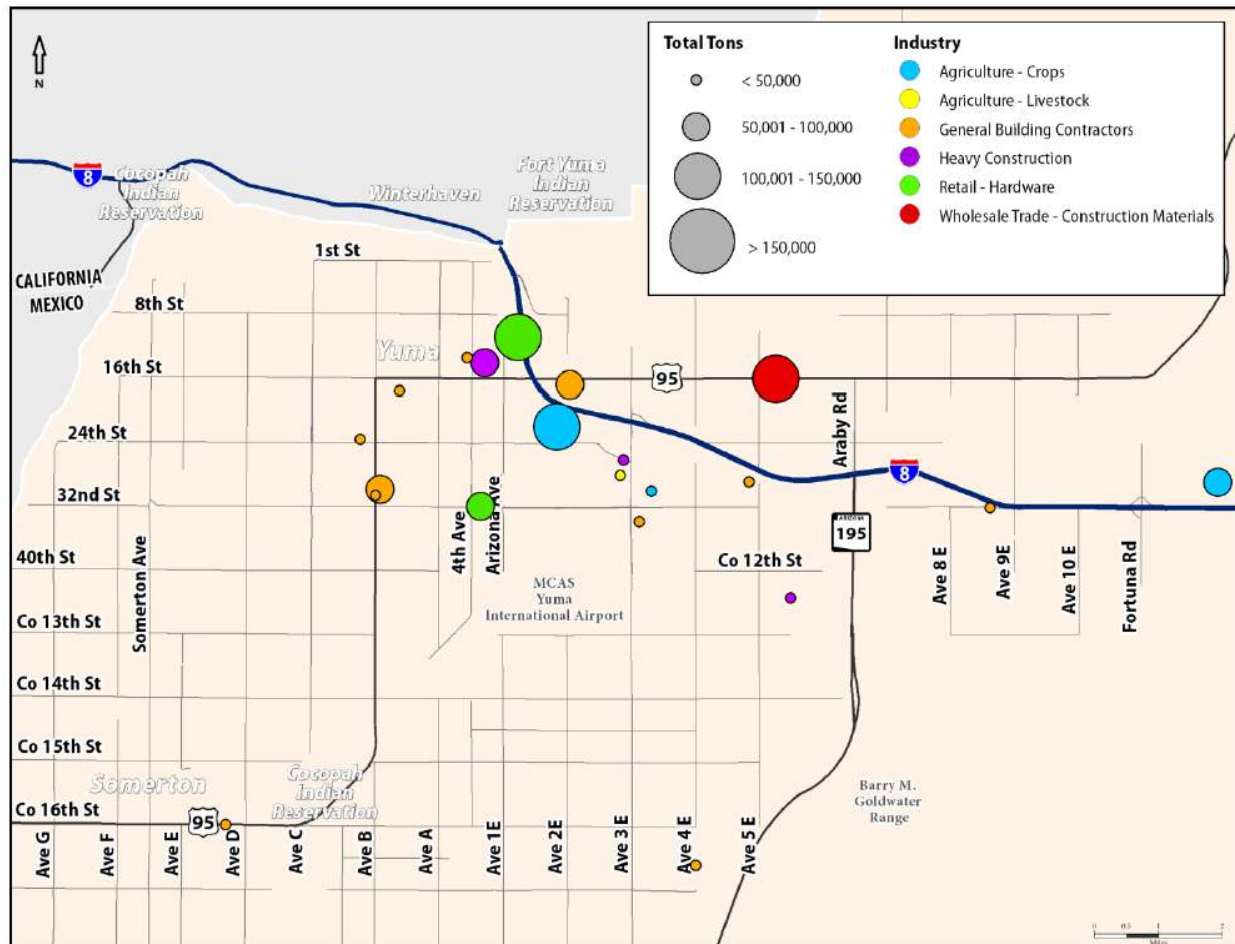


Source: City of Yuma

Figure 22 – Designated Truck Routes

7.3 Warehousing and Manufacturing

Warehousing and manufacturing establishments in the YMPO region originating or receiving over 20,000 tons per year were identified as part of the *Yuma County Rail Study*. A graphic from that study showing these warehousing and manufacturing establishments is shown in **Figure 23**.



Source: YMPO Yuma County Rail Corridor Study

Figure 23 – Warehousing and Manufacturing Establishments

7.4 Programmed Freight Network Improvement Projects

UPRR has embarked upon a major investment program to add a second parallel track to increase the capacity of the Sunset Corridor. Per the *Yuma County Rail Corridor Study*, UPRR expects to have double-tracked 70 percent of the Sunset Corridor by the end of 2012. The existing UPRR crossing of the Colorado River near the Arizona/California border represents a potential bottleneck as there is little room to build a second track at that location.



8 AVIATION

Aviation facilities are key components of regional economic vitality. Significant investments are required to develop and maintain these facilities and to provide the ground transportation infrastructure needed for efficient intermodal connectivity. The YMPO region is well served by a combination of public, private, and military aviation facilities. The primary aviation facilities in the region are the Yuma International Airport and MCAS in Yuma and Rolle Airfield in San Luis. There is also a private airport in Somerton and auxiliary airfields scattered across the YMPO region that support military operations and training.

8.1 Existing Aviation Facilities

8.1.1 Yuma International Airport

The Yuma International Airport is one of 11 commercial service airports in Arizona. Commercial air activity at the Yuma International Airport includes two commercial airlines that provide service to Phoenix and Los Angeles. The Yuma International Airport passenger terminal building provides five air carrier gate positions, expanded ticketing, baggage claim, and departure areas, as well as a mechanized baggage claim system. There is also an air cargo parking ramp at the airport to serve air freight operations. The public entrance to the Yuma International Airport is located on 32nd Street at Pacific Avenue.

The airport has four runways, with two being used primarily for commercial and general aviation aircraft and two being used for military operations. The airport served 167,500 passengers in 2008 according to the *Yuma International Airport Master Plan Update*. In 2011, there was an average of 532 daily aircraft operations at the airport, categorized as follows: 52 percent military, 29 percent local general aviation, 13 percent commercial, and 6 percent transient general aviation (per website www.aimav.com).

8.1.2 Marine Corps Air Station (MCAS)

MCAS is co-located with the Yuma International Airport. It is home to several squadrons of Harrier aircraft and several flight training programs. MCAS staffs the air traffic control tower and provides air traffic control services for both military and civilian aircraft. There have been numerous construction projects completed recently at MCAS in preparation for the facility receiving several squadrons of the next-generation fighter aircraft called the F-35 Lightning II Joint Strike Fighter (JSF). There are two gated entrances to the east side of MCAS on Avenue 3E. The main gate is located just north of 40th Street. The secondary gate is located approximately 1,500 feet north of the main gate.

8.1.3 Rolle Air Field

Rolle Air Field is a daytime-use-only general aviation airport in San Luis. The military also conducts aviation-related training at Rolle Airfield. The airport was reopened in 2011 after completion of a massive construction project that included rebuilding the runway, adding an aircraft parking apron, building a new hangar and installing a new security system with new fencing. It serves as a “relief” facility for civilian aircraft, allowing pilots and students to practice and learn standard flight maneuvers.



8.2 Programmed Airport Improvement Projects

There are several airport improvement projects programmed in the *ADOT 2013-2017 Five-Year Construction Program* for Yuma International Airport and Rolle Airfield. Funding has been committed and construction is anticipated to start no later than 2017.

At Yuma International Airport, programmed improvements include widening taxiways, installing taxiway lights, and constructing/extending aprons.

At Rolle Airfield, programmed improvements include an airport master plan update, environmental assessment for a new runway, constructing a taxiway, and installing taxiway lights.

Per the *MCAS-Yuma Master Plan*, the main gate/entrance for MCAS is programmed to be moved from Avenue 3E to a new southerly entrance off 56th Street/County 14th Street in fiscal year 2014.

9 BORDER INFRASTRUCTURE

Because the YMPO region borders Mexico and California, there is a combination of international and state ports of entry (POE) within the region. Existing border infrastructure and programmed border facility improvement projects are discussed in this chapter.

9.1 Existing Border Facilities

9.1.1 International POEs

There are two international POEs in San Luis at the U.S./Mexico border.

San Luis I POE is used for privately-owned vehicles and pedestrian traffic. It has six lanes and one SENTRI (pre-cleared) lane in the northbound direction for vehicles and two lanes in the southbound direction. For pedestrians and bicyclists there are six workstations and one lane in the northbound direction and one lane southbound. There are also special lanes for buses, high occupancy vehicles, recreation vehicles, and emergency vehicles.



San Luis I Port of Entry

San Luis II POE is used for commercial vehicles only. It has two primary inspection booths, 25 commercial docks with five enclosed for climate control, six export facility docks, a Vehicle and Cargo Inspection System (VACIS), gamma ray and X-ray inspection building, and hazardous materials facilities. There is also an ADOT State Motor Carrier Safety Inspection Station adjacent to San Luis II POE. SR 195 provides a roadway connection from San Luis II POE to I-8 that is an easterly bypass of San Luis, Somerton, and Yuma.

The Greater Yuma Port Authority, Inc. (GYPA), established in 2000, is a nonprofit corporation formed to promote and develop the economic wellness of the YMPO region. Current members are the Cocopah Indian Tribe, Yuma County, City of San Luis, and City of Yuma. Crossing statistics for the San Luis POEs were obtained from the GYPA website (www.gypa.org/crossing_statistics.html). **Table 18** summarizes crossing data for the months of January 2012 through April 2012 (the most recently available data).

Table 18 – San Luis POE Border Crossing Data (January 2012-April 2012)

Month	Private Vehicles (POE I)	Pedestrians (POE I)	Commercial Vehicles (POE II)
January	214,807	271,004	4,167
February	211,703	235,222	4,492
March	219,346	244,378	4,530
April	203,312	207,697	2,953

Source: GYPA



9.1.2 State POEs

ADOT operates two commercial vehicle State POEs in the YMPO region. The I-8 POE is located on I-8 near the Giss Parkway/I-8 WB Ramps interchange and includes facilities for checking the credentials, weight, and condition of both inbound (eastbound) and outbound (westbound) commercial vehicles. The Business 8 (B-8) POE is located on 4th Avenue north of 1st Street and includes facilities for checking the credentials, weight, and condition of inbound (southbound) commercial vehicles.

9.2 Programmed Border Facilities Improvement Projects

ADOT has programmed an improvement project in fiscal year 2013 for US 95/Main Street in San Luis between the San Luis I POE and Juan Sanchez Boulevard per the *ADOT 2013-2017 Five-Year Construction Program*. The improvement project will cul-de-sac US 95/Main Street and replace it with a one-way pair of adjacent parallel roads to improve traffic flow and safety in the vicinity of San Luis I POE.

ADOT has also programmed an improvement project in fiscal year 2017 for the design of a new or reconstructed I-8 POE per the *ADOT 2013-2017 Five-Year Construction Program*.

According to the GYPA, an improvement project is programmed for the San Luis I POE. The U.S. General Services Administration (GSA) has allocated funding for expansion and rehabilitation of the San Luis I POE. The rehabilitation project will provide a more safe and efficient crossing environment for vehicles and pedestrians.

San Luis has programmed funds in fiscal year 2013 per the *YMPO 2011-2016 Transportation Improvement Program* to widen Avenue E from two to four through lanes between SR 195 and County 25th Street, improving access to and from San Luis II POE



10 TRANSPORTATION SECURITY

The YMPO region has developed plans to mitigate adverse impacts from hazardous natural or manmade events. In 2004 and 2005, Yuma County and the incorporated cities and towns in Yuma County initially participated in a multi-jurisdictional mitigation planning process. YMPO member jurisdictions developed the following planning documents:

- *Yuma County Multi-Hazard Mitigation Plan*
- *City of San Luis Multi-Hazard Mitigation Plan*
- *City of Somerton Multi-Hazard Mitigation Plan*
- *Town of Wellton Multi-Hazard Mitigation Plan*
- *City of Yuma Multi-Hazard Mitigation Plan*

FEMA approved these plans between 2005 and 2006. In 2010, a five-year update was completed and the plans were consolidated into one overall plan called the *Yuma County Multi-Jurisdictional Hazard Mitigation Plan*. This consolidated plan provides information on potential hazards, including a description, history, probability and magnitude, vulnerability, sources, and profile maps. The hazards evaluated include transportation crashes, drought, earthquakes, flooding, severe wind, and wildfire.

With respect to transportation crashes, the report notes that Yuma County residents have been exposed to several train derailments, multiple car crashes due to dense fog and blowing dust, and numerous airplane crashes. Most of the airplane crashes have been military planes associated with either MCAS or YPG. The report notes that with respect to probability and magnitude of occurrence:

“The combined impact of all the air and roadway traffic presents an appreciable hazard potential to the urbanized areas of the Yuma valley, especially if hazardous materials are involved. Within Yuma County, the City of Yuma experiences a greater number of crashes due to the higher population center, in proportion with the smaller communities. Based on historical events for the past 40 years, it is a high probability that a serious transportation accident will occur almost every year. Without a detailed history of air and rail transportation accidents, the probability of such accidents can only be expressed qualitatively. The probability is increased during inclement weather, periods of poor visibility from fog, smoke, or dust, and during holiday festivities with more instances of drinking and driving, and during times of increased traffic volumes.”



11 AIR QUALITY

YMPO has the responsibility to ensure that the transportation plans and programs within the YMPO region conform to the state and national air quality plans and standards. Specifically, air quality impacts of proposed projects in the YMPO's five-year Transportation Improvement Program (TIP) and RTP must be consistent with and conform to national ambient air quality standards (NAAQS).

11.1 Conformance with Air Quality Standards

NAAQS have been established through the Clean Air Act for six principal pollutants, which are called "criteria" pollutants. Since 1990, the Yuma area has been designated as a nonattainment area for one of these pollutants – particulate matter (dust) smaller than ten micrometers (PM₁₀).

In 2006, the Arizona Department of Environmental Quality (ADEQ) submitted a request to the U.S. Environmental Protection Agency (EPA) to redesignate the Yuma area as being in attainment for PM₁₀ on the basis that exceedances of the PM₁₀ standard were a result of "exceptional events". To date, EPA has not acted on this redesignation request.

The most recent exceedance of the PM₁₀ standard occurred in the Yuma area on July 3, 2011. ADEQ has prepared documentation to support classifying this exceedance as another exceptional event that was a result of naturally occurring windblown dust and was not reasonably controllable or preventable.

11.2 Transportation Control Measures

In 1992, Transportation Control Measures (TCMs) were established. TCMs are transportation improvements planned and implemented for the purpose of reducing pollutant emissions and improving air quality. In addition, local governments have adopted, implemented and enforced Reasonable Available Control Measures (RACMs). Some of the RACMs implemented include:

- Paving, stabilizing, and/or reducing travel on unpaved streets, roads, and unpaved areas
- Watering unpaved streets, alleys, shoulders, and canal and levee roads
- Sweeping paved streets
- Reducing travel on canal roads
- Constructing improvements such as parking lots and landscaped areas to minimize the amount of undeveloped desert in developed areas that are exposed to the elements.

11.3 Dust Control Action Forecasts

A Natural Events Action Plan was developed for the Yuma area in 2006. This plan requires ADEQ to issue Dust Control Action Forecasts three days in advance of predicted high wind events. These forecasts are posted on ADEQ's website and distributed by ADEQ to the Yuma media, ADEQ's Southern Regional Office Community Liaison for Yuma, the Department of Agriculture to distribute to farmers, YPG and MCAS, local agency Public Works Departments, and other potential sources of PM₁₀ so that dust-generating activities can be rescheduled, thereby minimizing PM₁₀ emissions during predicted events.

11.4 Air Quality Conformity Analysis

The YMPO is required to undertake an air quality conformity analysis for two specific reasons:

(1) to ensure that transportation investments (projects), strategies and programs, taken as a whole, have air quality impacts consistent with and conforming to state and national air quality plans and standards; and



(2) to ensure that neither the transportation system as a whole nor individual transportation projects cause new air quality violations or worsen existing conditions.

The air quality conformity process establishes the connection between transportation planning and emission reductions from transportation sources and is intended to ensure that integrated transportation and air quality planning occurs in areas designated as non-attainment or maintenance areas by EPA. A regional emissions analysis must be conducted in order to assess the impacts that transportation projects will have on emissions within an air quality planning area.

An air quality conformance analysis was last performed in 2010, and reported in the YMPO *2011 Air Quality Conformity Report*. It reported on the results of the TCMs and RACMs from July 2009 through June 2010 and included projections of estimated emissions due to projected increases in vehicle miles traveled during the period of the *2011-2014 TIP*.

The 2010 conformity analysis established an annual Motor Vehicle Emissions Budget (MVEB) for the YMPO region. The MVEB levels are shown in **Table 19**. The MVEB for PM₁₀ emissions is 10,803 tons per year for the years 2016, 2026, and 2033. The results of the conformity analysis indicated that with an annual reduction of 370 tons from implementation of RACMs, both the *2011-2014 TIP* and the *2011-2033 RTP* are in conformance with the air quality requirements for PM₁₀.

Table 19 – Motor Vehicle Emissions Budget Comparisons

Budget Year	PM ₁₀ (tons per year)	Maintenance Plan Budget (tons per year)	Annual Reduction (tons per year)	Total Adjusted PM ₁₀ (tons per year)
2011	8,538	12,169	370	8,168
2016	9,839	10,803	370	9,469
2026	10,567	10,803	370	10,197
2033	10,881	10,803	370	10,511

Source: YMPO 2011 Air Quality Conformance Analysis



12 ENVIRONMENTAL CONSIDERATIONS

While transportation is an important aspect of life, it is important to consider potential negative impacts of transportation on the built and natural environment and what can be done to mitigate these impacts. The YMPO region's environmental mitigation efforts address water quality and conservation, air quality, noise and light pollution, solid waste disposal, and hazardous materials.

In Yuma, water conservation and water recharge are high priorities. Transportation-related mitigation strategies include reducing street pavement widths and using alternative pavement materials. In San Luis, the environmental areas of concern are underground leaking storage tanks, contaminated well water in mining areas, and air quality. In Somerton, environmental mitigation efforts include paving roadways to reduce particulates in the air, enforcing dust control measures, supporting public transportation to reduce vehicle trips, and improving air quality by reducing commuting distances for employees.

ADOT has developed a National Environmental Policy Act (NEPA) Action Plan that calls for YMPO to consult with regional partners to identify areas that may require environmental mitigation. Individual agencies are expected to contact the appropriate planning/conservation entity to discuss potential environmental mitigation efforts related to a specific project. YMPO facilitates consultation with local, state, regional, and tribal entities that are affected by transportation projects. Among the entities that may be involved in environmental consultation are:

- ADEQ
- ADOT
- ADOT Office of Environmental Services
- Arizona Department of Water Resources
- Arizona Game and Fish Department
- Arizona State Historic Preservation Office
- ASLD
- BLM
- BOR
- Bureau of Indian Affairs
- EPA
- FHWA
- MCAS
- National Park Service
- Quechan Indian Tribe
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- U.S. Forest Service
- YMPO Technical Advisory Committee Members
- YPG



APPENDIX A – 2007-2011 FATAL AND INCAPACITATING INJURY CRASH DATA – ALL CRASHES

Crash Date	Crash Road	Nearby Crossroad	Crash Offset	Injury Severity
12/30/2011	U 095	14 ALAMO DR	0.000000	FATAL
12/13/2011	14 24TH ST	14 AVENUE A	0.113600	FATAL
11/24/2011	I 008	M001	0.200000	FATAL
11/23/2011	14S FRONTAGE RD	14 AVENUE 10E	-0.109800	FATAL
11/16/2011	14 16TH ST	14 10TH AVE	0.000000	FATAL
10/21/2011	AVENUE C	38TH ST	0.071000	FATAL
10/20/2011	I 008	M055	0.200000	FATAL
10/13/2011	14 SOMERTON AVE	14 MAIN ST	0.000000	FATAL
10/3/2011	27TH ST	34TH AVE	0.071000	FATAL
6/25/2011	14 AVENUE B	14 CLAXTON ST	-0.078800	FATAL
5/14/2011	14 PALO VERDE ST	14 28TH ST	-0.018900	FATAL
5/12/2011	14 COUNTY 19TH ST	14 COLLEGE AVE	0.250000	FATAL
4/29/2011	14 8TH ST	14 21ST AVE	-0.004900	FATAL
4/25/2011	U 095	14 AVENUE 4E	0.000000	FATAL
3/16/2011	14 COUNTY 15TH ST	14 AVENUE 1E	0.000000	FATAL
3/8/2011	14 4TH AVE	14 CATALINA DR	0.000000	FATAL
3/4/2011	14 SOMERTON AVE	14 COUNTY 18TH ST	0.018900	FATAL
2/14/2011	US-95	COUNTY 12 1/2 ST	0.013100	FATAL
2/7/2011	U 095	M037	0.100000	FATAL
1/13/2011	AVENUE 9E	ARABY BLAISDELL RD	0.018900	FATAL
11/26/2010	24TH ST	23RD LN	0.009500	FATAL
11/16/2010	14 AVENUE B	14 5TH ST	-0.000900	FATAL
10/5/2010	I 008 0	M032	0.300000	FATAL
9/28/2010	14 AVENUE 2E	14 13TH ST	-0.008500	FATAL
9/25/2010	14 4TH AVE	14 5TH ST	0.004700	FATAL
7/18/2010	14S FRONTAGE RD	14 AVENUE 15 E	-0.000100	FATAL
7/3/2010	U 095	14 AVENUE 3E	0.000000	FATAL
4/2/2010	14 COUNTY 14TH ST	14 AVENUE D	-0.400000	FATAL
3/6/2010	14 AVENUE D	14 COUNTY 8 1/2 ST	-0.100000	FATAL
3/4/2010	AVENUE B	13TH LN	0.000000	FATAL



Crash Date	Crash Road	Nearby Crossroad	Crash Offset	Injury Severity
2/22/2010	U 095	14 ARABY RD	0.000000	FATAL
1/12/2010	14 COUNTY 11TH ST	14 AVENUE F	-0.500000	FATAL
1/9/2010	14 COUNTY 15TH ST	14 AVENUE 3E	0.300000	FATAL
12/27/2009	14 AVENUE 3E	14 COUNTY 16TH ST	0.000000	FATAL
12/25/2009	LEVEE RD	CALLE AGUA SALADA	0.000000	FATAL
11/19/2009	AVENUE F	COUNTY 18 1/2 ST	0.500000	FATAL
10/23/2009	SCOTTSDALE DR	34TH PL	0.011600	FATAL
10/23/2009	AVENUE 29E	COUNTY 8TH ST	0.002800	FATAL
10/7/2009	14 OLD HWY 80	14 2ND AVE	-0.016900	FATAL
9/24/2009	14 COUNTY 15TH ST	14 SOMERTON AVE	0.094700	FATAL
8/31/2009	14 4TH AV EXTENSION	14 COUNTY 14TH ST	0.098100	FATAL
7/26/2009	14 MARTINEZ LAKE RD	U 095	-2.500000	FATAL
7/23/2009	14 32ND ST	14 AVENUE 5E	0.000000	FATAL
7/12/2009	I 008	M058	0.200000	FATAL
7/12/2009	AVENUE B	COUNTY 22ND ST	0.000000	FATAL
6/5/2009	U 095	M074	0.600000	FATAL
5/28/2009	S 195	M026	0.000000	FATAL
5/23/2009	14 1ST ST	14 20TH AVE	0.022700	FATAL
5/10/2009	14 COUNTY 16TH ST	14 AVENUE 2E	0.250000	FATAL
4/23/2009	GLENDALE RD	CAMINO DEL SAGUARO	0.000000	FATAL
4/17/2009	14 GILA RIDGE RD	14 AVENUE 3E	-0.142000	FATAL
3/30/2009	14 24TH ST	U 095	0.094700	FATAL
3/12/2009	MOHAWK CANAL RD	COUNTY 5TH ST	0.501900	FATAL
2/7/2009	14 AVENUE 2E	14 COUNTY 13TH ST	0.000000	FATAL
1/25/2009	SB008 1	14 AVENUE 3 1/2E	-0.104200	FATAL
1/19/2009	SB008 1	14 AVENUE 3 1/2E	0.000000	FATAL
12/29/2008	I 008	M008	0.400000	FATAL
11/1/2008	I 008 0	M001	0.900000	FATAL
10/28/2008	14 AVENUE B	14 16TH ST	0.000000	FATAL
10/23/2008	I 008	M039	0.100000	FATAL
10/2/2008	14 24TH ST	14 INDUSTRIAL AVE	0.052100	FATAL
9/27/2008	14 14TH AVE	14 10TH ST	0.010400	FATAL
9/7/2008	14 AVENUE A	14 21ST ST	-0.007200	FATAL
9/6/2008	14 AVENUE 3E	14 COUNTY 15 1/2 ST	0.000000	FATAL
7/15/2008	14 AVENUE G	14 COUNTY 14TH ST	-0.007000	FATAL



Crash Date	Crash Road	Nearby Crossroad	Crash Offset	Injury Severity
6/30/2008	14 8TH ST	14 13TH AVE	-0.000800	FATAL
6/21/2008	14 FARM ACCESS RD	14 AVENUE G	-0.500000	FATAL
6/15/2008	14 JUAN SANCHEZ BLVD	14 AVENUE D	0.037900	FATAL
5/7/2008	I 008 0	M073	0.100000	FATAL
5/1/2008	I 008	M076	0.100000	FATAL
4/26/2008	14 B ST	14 4TH DR	0.000000	FATAL
4/8/2008	14 2ND AVE	14 8TH ST	0.000000	FATAL
4/2/2008	14 ORANGE AVE	14 9TH ST	0.007200	FATAL
3/1/2008	14 24TH ST	14 AVENUE 2 1/2E	-0.036000	FATAL
2/28/2008	14 COUNTY 4TH ST	14 AVENUE 16E	0.500000	FATAL
2/10/2008	14 AVENUE D	14 COUNTY 12TH ST	-0.400000	FATAL
2/5/2008	U 095	M009	0.600000	FATAL
1/24/2008	14 SOMERTON AVE	14 COUNTY 18TH ST	0.000000	FATAL
1/19/2008	14 COUNTY 8TH ST	14 VAUGHN AVE	0.004700	FATAL
1/4/2008	I 008 0	M066	0.300000	FATAL
12/20/2007	I 008	M002	0.300000	FATAL
12/16/2007	14 AVENUE 3E	14 COUNTY 19TH ST	0.100000	FATAL
12/13/2007	14 32ND ST	14 AVENUE 6E	0.000000	FATAL
12/7/2007	I 008	M056	0.000000	FATAL
11/20/2007	U 095	14 ARABY RD	0.000000	FATAL
11/17/2007	14 PALOMAS RD	14 AVENUE 64E	7.700000	FATAL
11/15/2007	14 COUNTY 14TH ST	14 AVENUE 2E	0.040500	FATAL
11/11/2007	U 095	M004	0.500000	FATAL
11/10/2007	U 095	M024	0.100000	FATAL
11/5/2007	14 COUNTY 18TH ST	14 AVENUE 1E	-0.250000	FATAL
10/31/2007	14 AVENUE B	14 COUNTY 20TH ST	-0.700000	FATAL
10/13/2007	U 095	M010	0.700000	FATAL
9/21/2007	I 008	M014	0.200000	FATAL
8/20/2007	SB008 1	14 12TH ST	-0.074400	FATAL
8/17/2007	U 095	14 PATE DR	0.000000	FATAL
7/28/2007	I 008 1	14 AVENUE 10E	0.200000	FATAL
7/1/2007	14 AVENUE C	14 COUNTY 15TH ST	0.037900	FATAL
5/14/2007	14 AVENUE A	14 DESERT LAKES DR	0.006800	FATAL
4/30/2007	I 008 0	M071	0.900000	FATAL



Crash Date	Crash Road	Nearby Crossroad	Crash Offset	Injury Severity
4/10/2007	14 AVENUE A	14 COUNTY 12TH ST	-0.200000	FATAL
4/7/2007	I 008 0	M010	0.600000	FATAL
3/23/2007	14 4TH AV EXTENSION	14 COUNTY 14TH ST	0.600000	FATAL
3/19/2007	14 URTUZUASTEGUI ST	14 CESAR CHAVEZ ST	0.014200	FATAL
2/20/2007	14 RIDGE VIEW DR	14 PARKWAY DR	-0.015200	FATAL
2/4/2007	U 095	M032	0.900000	FATAL
1/28/2007	14 WILLIAM ST	14 PACIFIC AVE	-0.400000	FATAL
1/11/2007	SB008 1	14 18TH ST	0.007600	FATAL
12/31/2011	14 28TH ST	14 4TH AVE	-0.018900	INCAPACITATING_INJURY
12/19/2011	24TH ST	AVENUE 7 1/2E	0.000000	INCAPACITATING_INJURY
12/19/2011	14 14TH ST	14 4TH AVE	-0.007000	INCAPACITATING_INJURY
12/12/2011	I 008021A	I 008	0.100000	INCAPACITATING_INJURY
12/7/2011	14 18TH AVE	14 24TH ST	-0.005700	INCAPACITATING_INJURY
11/26/2011	14 32ND ST	14 AVENUE 2E	0.000000	INCAPACITATING_INJURY
11/21/2011	I 008 0	M059	0.400000	INCAPACITATING_INJURY
11/15/2011	14 B ST	U 095	0.000000	INCAPACITATING_INJURY
11/10/2011	24TH ST	CAMINO BARRANCA	-0.018900	INCAPACITATING_INJURY
11/8/2011	U 095	14 AVENUE 5E	0.000000	INCAPACITATING_INJURY
10/31/2011	U 095	14 AVENUE 5E	0.000000	INCAPACITATING_INJURY
10/19/2011	I 008	M072	0.500000	INCAPACITATING_INJURY
10/16/2011	14 AVENUE 3E	14 COUNTY 13TH ST	0.000000	INCAPACITATING_INJURY
9/29/2011	U 095	14 16TH ST	0.014200	INCAPACITATING_INJURY
9/21/2011	14 40TH ST	14 FOOTHILLS BLVD	0.000000	INCAPACITATING_INJURY
9/13/2011	14 8TH ST	14 7TH AVE	0.004700	INCAPACITATING_INJURY
9/12/2011	14 1ST ST	14 6TH AVE	0.000000	INCAPACITATING_INJURY
8/28/2011	14 COUNTY 17TH ST	14 AVENUE B	0.000000	INCAPACITATING_INJURY
8/26/2011	14 MARY AVE	14 24TH ST	0.013300	INCAPACITATING_INJURY
8/20/2011	14 32ND ST	14 AVENUE 8E	0.009500	INCAPACITATING_INJURY
7/31/2011	I 008	M046	0.000000	INCAPACITATING_INJURY
7/19/2011	14 AVENUE D	14 COUNTY 8TH ST	-0.002500	INCAPACITATING_INJURY
7/18/2011	I 008	M042	0.500000	INCAPACITATING_INJURY
7/18/2011	14 32ND ST	14 ARIZONA AVE	0.000000	INCAPACITATING_INJURY
7/9/2011	I 008 0	M005	0.500000	INCAPACITATING_INJURY
7/9/2011	14 32ND ST	14 AVENUE 3E	-0.018900	INCAPACITATING_INJURY
6/25/2011	I 008 0	M044	0.900000	INCAPACITATING_INJURY



Crash Date	Crash Road	Nearby Crossroad	Crash Offset	Injury Severity
6/17/2011	14 16TH ST	14 7TH AVE	0.004700	INCAPACITATING_INJURY
6/14/2011	14 4TH AV EXTENSION	14 COUNTY 14TH ST	0.164800	INCAPACITATING_INJURY
5/24/2011	14 8TH ST	14 15TH AVE	0.000000	INCAPACITATING_INJURY
5/21/2011	14 11TH ST	14 MADISON AVE	-0.028400	INCAPACITATING_INJURY
5/5/2011	14 FOOTHILLS BLVD	14 41ST ST	0.008700	INCAPACITATING_INJURY
4/18/2011	14 24TH ST	14 17TH AVE	0.000000	INCAPACITATING_INJURY
4/17/2011	I 008 0	M009	0.600000	INCAPACITATING_INJURY
4/15/2011	SB008	14 AVENUE 2E	0.113600	INCAPACITATING_INJURY
4/3/2011	14 24TH ST	14 KENNEDY LN	0.033900	INCAPACITATING_INJURY
4/3/2011	14 GISS PKWY	14 REDONDO CENTER DR	0.098700	INCAPACITATING_INJURY
4/3/2011	14 16TH ST	I 008002G	0.042600	INCAPACITATING_INJURY
3/21/2011	14 4TH AVE	14 17TH ST	0.048500	INCAPACITATING_INJURY
3/18/2011	14 1ST ST	14 6TH AVE	0.000000	INCAPACITATING_INJURY
3/17/2011	14 32ND ST	14 CHEVY LN	0.000000	INCAPACITATING_INJURY
3/12/2011	14S FRONTAGE RD	14 AVENUE 10E	-0.018900	INCAPACITATING_INJURY
3/3/2011	14 CATALINA DR	14 4TH AVE	-0.047300	INCAPACITATING_INJURY
3/2/2011	I 008054B	M055	0.140000	INCAPACITATING_INJURY
2/19/2011	14 COUNTY 13TH ST	14 AVENUE 3E	0.083000	INCAPACITATING_INJURY
2/17/2011	14 24TH ST	14 8TH AVE	0.000000	INCAPACITATING_INJURY
2/12/2011	14 VIRGINIA DR	14 28TH ST	0.004700	INCAPACITATING_INJURY
2/10/2011	14 24TH ST	14 5TH AVE	0.000000	INCAPACITATING_INJURY
2/1/2011	14 32ND ST	14 BONANZA AVE	-0.038800	INCAPACITATING_INJURY
1/30/2011	U 095	14 24TH ST	0.000000	INCAPACITATING_INJURY
1/25/2011	14 COUNTY 19TH ST	14 AVENUE 3E	-0.500000	INCAPACITATING_INJURY
1/12/2011	14 32ND ST	14 AVENUE A	0.000000	INCAPACITATING_INJURY
1/1/2011	14 4TH AVE	14 26TH ST	0.000000	INCAPACITATING_INJURY
12/24/2010	14 24TH ST	14 7TH AVE	0.000000	INCAPACITATING_INJURY
12/11/2010	14 COUNTY 19TH ST	14 AVENUE G	0.000000	INCAPACITATING_INJURY
12/6/2010	14 32ND ST	14 AVENUE 2E	-0.140200	INCAPACITATING_INJURY
11/29/2010	14 32ND ST	14 ARABY RD	-0.142000	INCAPACITATING_INJURY
11/27/2010	I 008 0	M033	0.800000	INCAPACITATING_INJURY
11/20/2010	14 COUNTY 14TH ST	14 AVENUE C	-0.200000	INCAPACITATING_INJURY
11/15/2010	14 AVENUE A	14 17TH ST	0.000000	INCAPACITATING_INJURY
11/7/2010	14 32ND ST	14 AVENUE 5E	0.000000	INCAPACITATING_INJURY
11/4/2010	U 095	14 LOS OROS ST	0.000000	INCAPACITATING_INJURY



Crash Date	Crash Road	Nearby Crossroad	Crash Offset	Injury Severity
10/22/2010	I 008 0	M020	0.800000	INCAPACITATING_INJURY
10/14/2010	I 008	M037	0.100000	INCAPACITATING_INJURY
10/9/2010	14 AVENUE 3E	14 COUNTY 15TH ST	0.000000	INCAPACITATING_INJURY
9/26/2010	I 008	M001	0.800000	INCAPACITATING_INJURY
9/24/2010	14 GISS PKWY	14 REDONDO CENTER DR	0.000000	INCAPACITATING_INJURY
9/12/2010	14 MADISON AVE	14 3RD ST	0.000000	INCAPACITATING_INJURY
9/9/2010	14 14TH ST	14 10TH AVE	0.009500	INCAPACITATING_INJURY
9/6/2010	14 22ND ST	14 5TH AVE	-0.085200	INCAPACITATING_INJURY
8/30/2010	14 8TH ST	14 13TH AVE	0.000000	INCAPACITATING_INJURY
8/20/2010	14 4TH AVE	14 CATALINA DR	0.000000	INCAPACITATING_INJURY
8/18/2010	14 16TH ST	I 008002J	0.028400	INCAPACITATING_INJURY
8/11/2010	14 32ND ST	14 AVENUE 2 1/2E	0.000000	INCAPACITATING_INJURY
8/10/2010	U 095	14 COUNTY 21ST ST	0.250000	INCAPACITATING_INJURY
8/10/2010	14 24TH ST	14 ARIZONA AVE	-0.018900	INCAPACITATING_INJURY
7/20/2010	14S FRONTAGE RD	14 FORTUNA RD	-0.200000	INCAPACITATING_INJURY
7/15/2010	I 008	M045	0.800000	INCAPACITATING_INJURY
7/12/2010	14 16TH ST	14 5TH AVE	0.000000	INCAPACITATING_INJURY
6/26/2010	I 008 0	M047	0.300000	INCAPACITATING_INJURY
6/21/2010	14 FOOTHILLS BLVD	14S FRONTAGE RD	0.000000	INCAPACITATING_INJURY
6/19/2010	I 008037A	M037	0.020000	INCAPACITATING_INJURY
6/15/2010	14 17TH AVE	14 24TH ST	-0.018900	INCAPACITATING_INJURY
6/13/2010	14 VIRGINIA DR	14 25TH ST	0.050600	INCAPACITATING_INJURY
6/11/2010	I 008	M056	0.700000	INCAPACITATING_INJURY
6/6/2010	U 095	M057	0.400000	INCAPACITATING_INJURY
5/29/2010	U 095	M029	0.000000	INCAPACITATING_INJURY
5/27/2010	14 32ND ST	14 AVENUE 8E	0.000000	INCAPACITATING_INJURY
5/26/2010	I 008	M074	0.800000	INCAPACITATING_INJURY
5/11/2010	14 2ND AVE	14 19TH ST	0.000000	INCAPACITATING_INJURY
5/3/2010	14 AVENUE 4E	14 COUNTY 13TH ST	0.000000	INCAPACITATING_INJURY
4/25/2010	14 AVENUE B	14 16TH ST	0.000000	INCAPACITATING_INJURY
4/22/2010	14 AVENUE B	14 13TH PL	0.000000	INCAPACITATING_INJURY
4/18/2010	14 32ND ST	SB008	-0.011400	INCAPACITATING_INJURY
4/16/2010	I 008	M073	0.200000	INCAPACITATING_INJURY
4/15/2010	I 008 0	M022	0.500000	INCAPACITATING_INJURY
4/15/2010	14 8TH AVE	14 22ND ST	0.000000	INCAPACITATING_INJURY



Crash Date	Crash Road	Nearby Crossroad	Crash Offset	Injury Severity
4/14/2010	14 10TH ST	14 3RD AVE	0.000000	INCAPACITATING_INJURY
3/18/2010	I 008 0	M028	0.600000	INCAPACITATING_INJURY
3/17/2010	I 008	M021	0.700000	INCAPACITATING_INJURY
2/23/2010	U 095	M020	0.500000	INCAPACITATING_INJURY
2/21/2010	I 008	M019	0.600000	INCAPACITATING_INJURY
2/21/2010	14 16TH ST	14 VIA CIELO	-0.009500	INCAPACITATING_INJURY
2/18/2010	14 24TH ST	14 6TH AVE	0.000000	INCAPACITATING_INJURY
2/17/2010	U 095	14 ARABY RD	0.000000	INCAPACITATING_INJURY
2/17/2010	14 1ST AVE	14 9TH ST	-0.010400	INCAPACITATING_INJURY
2/9/2010	14 5TH AVE	14 11TH ST	0.000000	INCAPACITATING_INJURY
2/4/2010	14 1ST ST	14 15TH AVE	0.013300	INCAPACITATING_INJURY
2/3/2010	SB008 1	14 10TH ST	0.000000	INCAPACITATING_INJURY
2/1/2010	14 AVENUE 4E	14 COUNTY 12TH ST	0.000000	INCAPACITATING_INJURY
2/1/2010	14 AVENUE 3E	14 COUNTY 13TH ST	0.189400	INCAPACITATING_INJURY
2/1/2010	14 4TH AVE	14 10TH ST	-0.066300	INCAPACITATING_INJURY
1/31/2010	I 008	M051	0.500000	INCAPACITATING_INJURY
1/30/2010	U 095	M029	0.200000	INCAPACITATING_INJURY
1/30/2010	14 8TH ST	14 21ST AVE	0.000000	INCAPACITATING_INJURY
1/27/2010	14 AVENUE B	14 13TH PL	0.000000	INCAPACITATING_INJURY
1/19/2010	I 008 0	M021	0.700000	INCAPACITATING_INJURY
1/18/2010	14 AVENUE B	14 3RD ST	0.000000	INCAPACITATING_INJURY
1/12/2010	14N FRONTAGE RD	14 AVENUE 13E	0.500000	INCAPACITATING_INJURY
12/22/2009	14 32ND ST	14 AVENUE 5E	0.000000	INCAPACITATING_INJURY
12/21/2009	14 32ND ST	SB008 1	0.000000	INCAPACITATING_INJURY
12/18/2009	14 COUNTY 14TH ST	14 AVENUE E	0.014600	INCAPACITATING_INJURY
12/11/2009	14 CATALINA DR	14 PALO VERDE ST	0.000000	INCAPACITATING_INJURY
12/10/2009	14 AVENUE 3E	14 COUNTY 14TH ST	0.266500	INCAPACITATING_INJURY
12/7/2009	I 008	M056	0.000000	INCAPACITATING_INJURY
12/7/2009	14 5TH ST	14 CEMETERY AVE	-0.011400	INCAPACITATING_INJURY
12/4/2009	14 24TH ST	14 MADISON AVE	0.000000	INCAPACITATING_INJURY
11/24/2009	14 AVENUE A	14 24TH ST	-0.056800	INCAPACITATING_INJURY
11/24/2009	14 AVENUE A	14 PALMCROFT DR	0.113600	INCAPACITATING_INJURY
11/23/2009	14 8TH ST	14 AVENUE B	0.000000	INCAPACITATING_INJURY
11/22/2009	I 008 0	M017	0.900000	INCAPACITATING_INJURY
11/18/2009	U 095	14 26TH ST	-0.001900	INCAPACITATING_INJURY



Crash Date	Crash Road	Nearby Crossroad	Crash Offset	Injury Severity
11/17/2009	U 095	M028	0.000000	INCAPACITATING_INJURY
11/12/2009	14 32ND ST	14 CREST DR	0.000000	INCAPACITATING_INJURY
11/8/2009	I 008	M031	0.700000	INCAPACITATING_INJURY
10/30/2009	U 095	M026	0.400000	INCAPACITATING_INJURY
10/22/2009	14 2ND ST	SB008 1	0.009500	INCAPACITATING_INJURY
10/21/2009	14 16TH ST	14 3RD AVE	0.028400	INCAPACITATING_INJURY
10/16/2009	14 COUNTY 14TH ST	14 AVENUE D	0.500000	INCAPACITATING_INJURY
10/14/2009	14 8TH ST	14 15TH AVE	-0.017000	INCAPACITATING_INJURY
10/8/2009	14 AVENUE 9E	14 24TH ST	0.000000	INCAPACITATING_INJURY
10/7/2009	14 24TH ST	14 8TH AVE	-0.102300	INCAPACITATING_INJURY
9/26/2009	14 3RD ST	14 11TH AVE	0.000000	INCAPACITATING_INJURY
9/20/2009	14 COUNTY 19TH ST	14 AVENUE F	-0.450000	INCAPACITATING_INJURY
9/18/2009	14 MADISON AVE	14 26TH PL	0.000000	INCAPACITATING_INJURY
9/13/2009	14 8TH ST	14 AVENUE A	0.028400	INCAPACITATING_INJURY
9/11/2009	14 3RD ST	14 11TH AVE	0.000000	INCAPACITATING_INJURY
9/10/2009	14 32ND ST	14 8TH AVE	0.000000	INCAPACITATING_INJURY
9/8/2009	14 PALO VERDE ST	14 CATALINA DR	0.000000	INCAPACITATING_INJURY
9/2/2009	14 32ND ST	14 AVENUE A	-0.080500	INCAPACITATING_INJURY
9/1/2009	14 14TH ST	14 8TH AVE	-0.020800	INCAPACITATING_INJURY
8/7/2009	14 8TH ST	14 AVENUE A	0.011400	INCAPACITATING_INJURY
7/31/2009	I 008	M020	0.700000	INCAPACITATING_INJURY
7/28/2009	14 13TH AVE	14 10TH ST	0.000000	INCAPACITATING_INJURY
7/25/2009	14 32ND ST	14 CHEVY LN	0.151500	INCAPACITATING_INJURY
7/17/2009	I 008	M058	0.000000	INCAPACITATING_INJURY
7/16/2009	14 CATALINA DR	SB008 1	-0.123100	INCAPACITATING_INJURY
7/4/2009	14 ARIZONA AVE	14 COUNTRY CLUB DR	0.000000	INCAPACITATING_INJURY
6/30/2009	14 32ND ST	14 AVENUE 5E	0.277800	INCAPACITATING_INJURY
6/30/2009	14 GISS PKWY	I 008	0.000000	INCAPACITATING_INJURY
6/20/2009	U 095	M043	0.300000	INCAPACITATING_INJURY
6/20/2009	14 AVENUE B	14 5TH ST	0.001900	INCAPACITATING_INJURY
6/19/2009	14 AVENUE C	14 16TH ST	0.000000	INCAPACITATING_INJURY
6/8/2009	14 AVENUE 3E	I 008003C	0.000000	INCAPACITATING_INJURY
5/29/2009	14 AVENUE B	14 4TH PL	0.000000	INCAPACITATING_INJURY
5/28/2009	14 16TH ST	14 AVENUE B	0.000000	INCAPACITATING_INJURY
5/27/2009	14 32ND ST	14 AVENUE A	0.000000	INCAPACITATING_INJURY



Crash Date	Crash Road	Nearby Crossroad	Crash Offset	Injury Severity
5/10/2009	14 1ST AVE	14 13TH ST	0.003400	INCAPACITATING_INJURY
5/5/2009	14 AVENUE C	14 14TH ST	0.000000	INCAPACITATING_INJURY
5/1/2009	I 008 0	M011	0.600000	INCAPACITATING_INJURY
4/29/2009	14 AVENUE 27E	14 COUNTY 10TH ST	-0.011600	INCAPACITATING_INJURY
4/26/2009	I 008 0	M006	0.300000	INCAPACITATING_INJURY
4/16/2009	U 095	14 24TH ST	0.000000	INCAPACITATING_INJURY
4/11/2009	14 GILA RIDGE RD	14 AVENUE 3E	-0.056800	INCAPACITATING_INJURY
4/10/2009	14 24TH ST	14 AVENUE A	0.000000	INCAPACITATING_INJURY
4/9/2009	14 32ND ST	U 095	0.000000	INCAPACITATING_INJURY
4/2/2009	14 24TH ST	14 18TH AVE	-0.113600	INCAPACITATING_INJURY
3/31/2009	U 095	14 AVENUE D	0.000000	INCAPACITATING_INJURY
3/22/2009	I 008001G	14 REDONDO CENTER DR	-0.189400	INCAPACITATING_INJURY
3/19/2009	U 095	M030	0.100000	INCAPACITATING_INJURY
3/19/2009	14 AVENUE C	14 CRANE ST	-0.003800	INCAPACITATING_INJURY
3/17/2009	U 095	M025	0.500000	INCAPACITATING_INJURY
3/17/2009	14 16TH ST	14 6TH AVE	0.004700	INCAPACITATING_INJURY
3/14/2009	14 4TH AV EXTENSION	14 AVENUE A	0.000000	INCAPACITATING_INJURY
3/9/2009	14 32ND ST	14 AVENUE 5E	0.080500	INCAPACITATING_INJURY
3/7/2009	14 AVENUE G	14 COUNTY 14TH ST	-0.100000	INCAPACITATING_INJURY
3/6/2009	14 32ND ST	14 AVENUE 5E	0.000000	INCAPACITATING_INJURY
2/27/2009	14 AVENUE B	14 16TH ST	0.000000	INCAPACITATING_INJURY
2/21/2009	U 095	14 26TH ST	0.000000	INCAPACITATING_INJURY
2/8/2009	I 008	M019	0.100000	INCAPACITATING_INJURY
2/6/2009	14 SOMERTON AVE	14 COUNTY 10TH ST	0.000000	INCAPACITATING_INJURY
2/5/2009	14 AVENUE 3E	14 COUNTY 14TH ST	-0.400000	INCAPACITATING_INJURY
1/30/2009	14 AVENUE B	14 12TH ST	0.000000	INCAPACITATING_INJURY
1/21/2009	I 008 0	M066	0.000000	INCAPACITATING_INJURY
1/18/2009	14 AVENUE C	14 12TH ST	0.000000	INCAPACITATING_INJURY
1/8/2009	14 24TH ST	14 8TH AVE	0.000000	INCAPACITATING_INJURY
1/1/2009	14 AVENUE A	14 32ND ST	0.031400	INCAPACITATING_INJURY
12/28/2008	I 008	M066	0.500000	INCAPACITATING_INJURY
12/25/2008	14 LEVEE RD	14 6TH ST	0.047300	INCAPACITATING_INJURY
12/23/2008	I 008 1	14 FORTUNA RD	-0.037900	INCAPACITATING_INJURY
12/19/2008	SB008 1	14 28TH ST	0.000000	INCAPACITATING_INJURY
12/18/2008	14 21ST ST	14 WALNUT AVE	-0.004900	INCAPACITATING_INJURY



Crash Date	Crash Road	Nearby Crossroad	Crash Offset	Injury Severity
12/10/2008	I 008	M054	0.000000	INCAPACITATING_INJURY
12/8/2008	I 008	M009	0.300000	INCAPACITATING_INJURY
12/6/2008	14 8TH ST	14 12TH AVE	0.013300	INCAPACITATING_INJURY
12/4/2008	14 24TH ST	14 6TH AVE	0.000000	INCAPACITATING_INJURY
12/4/2008	14 AVENUE A	14 22ND ST	0.000000	INCAPACITATING_INJURY
12/3/2008	14 21ST DR	14 25TH ST	0.037900	INCAPACITATING_INJURY
12/3/2008	14 32ND ST	14 AVENUE 6E	0.000000	INCAPACITATING_INJURY
11/28/2008	14 AVENUE G	14 COUNTY 14TH ST	-0.065200	INCAPACITATING_INJURY
11/27/2008	I 008 0	M033	0.000000	INCAPACITATING_INJURY
11/26/2008	I 008 0	M061	0.700000	INCAPACITATING_INJURY
11/25/2008	SB008 1	14 13TH ST	0.025200	INCAPACITATING_INJURY
11/24/2008	14 8TH ST	14 MAGNOLIA AVE	-0.033000	INCAPACITATING_INJURY
11/20/2008	U 095	M014	0.100000	INCAPACITATING_INJURY
11/16/2008	I 008002G	M002G	0.100000	INCAPACITATING_INJURY
11/1/2008	14 AVENUE A	14 SOLANA DR	-0.056800	INCAPACITATING_INJURY
10/30/2008	14 COUNTY 14TH ST	14 AVENUE 5E	0.000000	INCAPACITATING_INJURY
10/24/2008	14 MERRILL AVE	14 ZAPATA ST	0.000000	INCAPACITATING_INJURY
10/23/2008	14 18TH ST	14 AVENUE C	0.000000	INCAPACITATING_INJURY
10/22/2008	14 COUNTY 11TH ST	14 AVENUE F	0.005700	INCAPACITATING_INJURY
10/10/2008	14 AVENUE B	14 16TH ST	0.075800	INCAPACITATING_INJURY
10/9/2008	14 22ND ST	14 ARIZONA AVE	-0.001900	INCAPACITATING_INJURY
10/6/2008	14 AVENUE A	14 COUNTY 15TH ST	-0.200000	INCAPACITATING_INJURY
10/3/2008	14 FORTUNA RD	14 34TH PL	0.000000	INCAPACITATING_INJURY
9/27/2008	14 DORA AVE	14 9TH ST	0.014200	INCAPACITATING_INJURY
9/22/2008	14 AVENUE B	14 15TH ST	-0.063300	INCAPACITATING_INJURY
9/17/2008	SB008 1	14 AVENUE 3E	-0.018900	INCAPACITATING_INJURY
9/15/2008	14 16TH ST	14 8TH AVE	0.000000	INCAPACITATING_INJURY
9/13/2008	14 1ST AVE	14 20TH ST	0.000000	INCAPACITATING_INJURY
9/11/2008	14 17TH AVE	14 5TH ST	-0.031800	INCAPACITATING_INJURY
9/6/2008	I 008	M030	0.063300	INCAPACITATING_INJURY
9/6/2008	U 095	M041	0.500000	INCAPACITATING_INJURY
9/5/2008	14 AVENUE 7E	14 COUNTY 6TH ST	0.000000	INCAPACITATING_INJURY
9/5/2008	14 24TH ST	14 21ST DR	0.000000	INCAPACITATING_INJURY
9/5/2008	SB008 1	14 7TH ST	-0.028400	INCAPACITATING_INJURY
9/4/2008	14 ARABY RD	14 COUNTY 9 1/2 ST	-0.011200	INCAPACITATING_INJURY



Crash Date	Crash Road	Nearby Crossroad	Crash Offset	Injury Severity
8/30/2008	14 16TH ST	14 ARIZONA AVE	0.047300	INCAPACITATING_INJURY
8/29/2008	14 AVENUE B	14 COUNTY 18TH ST	-0.250000	INCAPACITATING_INJURY
8/16/2008	14 46TH WAY	14 20TH ST	0.000000	INCAPACITATING_INJURY
8/13/2008	14 16TH PL	14 13TH AVE	0.000000	INCAPACITATING_INJURY
8/8/2008	I 008 0	M067	0.100000	INCAPACITATING_INJURY
8/3/2008	14 AVENUE B	14 COUNTY 23RD ST	0.000000	INCAPACITATING_INJURY
7/31/2008	14 32ND ST	14 AVENUE 4E	-0.009500	INCAPACITATING_INJURY
7/25/2008	14 16TH ST	14 8TH AVE	0.004000	INCAPACITATING_INJURY
7/24/2008	14 21ST PL	14 1ST AVE	-0.056800	INCAPACITATING_INJURY
7/23/2008	SB008 1	14 11TH ST	0.000000	INCAPACITATING_INJURY
7/21/2008	14 CASTLE DOME MINE RD	U 095	0.100000	INCAPACITATING_INJURY
7/19/2008	I 008 0	M059	0.300000	INCAPACITATING_INJURY
7/19/2008	14 AVENUE B	14 16TH ST	0.000000	INCAPACITATING_INJURY
6/28/2008	14 6TH ST	14 AVENUE A	0.000000	INCAPACITATING_INJURY
6/18/2008	U 095	14 22ND ST	0.000000	INCAPACITATING_INJURY
6/11/2008	14 AVENUE C	14 26TH ST	0.015700	INCAPACITATING_INJURY
6/10/2008	14 COUNTY 8TH ST	14 ECHO AVE	0.000000	INCAPACITATING_INJURY
5/29/2008	14 1ST AVE	14 8TH ST	-0.037900	INCAPACITATING_INJURY
5/27/2008	14 AVENUE B	14 12TH ST	0.021000	INCAPACITATING_INJURY
5/21/2008	14 16TH ST	14 REDONDO CENTER DR	0.047300	INCAPACITATING_INJURY
5/20/2008	I 008 2	14 AVENUE 11E	0.028400	INCAPACITATING_INJURY
5/20/2008	14 LEVEE RD	14 AVENUE 4 1/2E	0.400000	INCAPACITATING_INJURY
5/19/2008	14 3RD ST	14 AVENUE B	-0.018900	INCAPACITATING_INJURY
5/18/2008	14 12TH ST	14 AVENUE C	0.000000	INCAPACITATING_INJURY
5/15/2008	14 AVENUE 3E	14 COUNTY 15TH ST	0.000000	INCAPACITATING_INJURY
5/15/2008	14 REDONDO CENTER DR	14 16TH ST	0.365000	INCAPACITATING_INJURY
5/9/2008	14 AVENUE 1E	14 COUNTY 17TH ST	0.500000	INCAPACITATING_INJURY
5/5/2008	14 COUNTY 8TH ST	14 YAVAPAI LN	0.000000	INCAPACITATING_INJURY
5/3/2008	I 008 1	14 AVENUE 10E	-0.100000	INCAPACITATING_INJURY
4/22/2008	I 008 1	14 MESA AVE	0.028400	INCAPACITATING_INJURY
4/19/2008	14 YUMA PALMS PKWY	14 CASTLE DOME AVE	0.037900	INCAPACITATING_INJURY
4/17/2008	14 24TH ST	14 18TH AVE	0.000000	INCAPACITATING_INJURY
4/17/2008	14 24TH ST	14 JAMES AVE	-0.001900	INCAPACITATING_INJURY
4/13/2008	I 008 0	M008	0.100000	INCAPACITATING_INJURY



Crash Date	Crash Road	Nearby Crossroad	Crash Offset	Injury Severity
4/13/2008	14 HAUPT AVE	14 13TH LN	-0.005700	INCAPACITATING_INJURY
4/3/2008	14 32ND ST	14 28TH DR	0.000000	INCAPACITATING_INJURY
3/29/2008	14 32ND ST	14 AVENUE 4E	0.012100	INCAPACITATING_INJURY
3/28/2008	14 15TH ST	SB008 1	0.014600	INCAPACITATING_INJURY
3/26/2008	SB008 1	14 19TH ST	0.001900	INCAPACITATING_INJURY
3/25/2008	U 095	M037	0.200000	INCAPACITATING_INJURY
3/20/2008	SB008 1	14 22ND ST	-0.018900	INCAPACITATING_INJURY
3/19/2008	I 008 2	14 AVENUE 14E	-0.200000	INCAPACITATING_INJURY
3/18/2008	14 16TH ST	14 2ND AVE	0.000000	INCAPACITATING_INJURY
3/18/2008	14 24TH ST	14 7TH AVE	0.000000	INCAPACITATING_INJURY
3/17/2008	14 32ND ST	14 AVENUE 2E	0.011700	INCAPACITATING_INJURY
3/17/2008	SB008 1	14 24TH ST	0.001900	INCAPACITATING_INJURY
3/12/2008	14 AVENUE 3E	14 COUNTY 12TH ST	0.200000	INCAPACITATING_INJURY
3/1/2008	14 FORTUNA RD	14 38TH PL	-0.100000	INCAPACITATING_INJURY
2/28/2008	U 095	14 AVENUE 5E	0.000000	INCAPACITATING_INJURY
2/22/2008	14 11TH AVE	14 3RD ST	0.000000	INCAPACITATING_INJURY
2/17/2008	14 AVENUE 5E	14 28TH ST	0.000000	INCAPACITATING_INJURY
2/15/2008	I 008 0	M058	0.500000	INCAPACITATING_INJURY
2/14/2008	14 AVENUE C	14 LINDA LN	0.018900	INCAPACITATING_INJURY
2/13/2008	U 095	14 AVENUE 3E	0.000000	INCAPACITATING_INJURY
2/13/2008	SB008 1	14 13TH ST	-0.037900	INCAPACITATING_INJURY
2/9/2008	14 32ND ST	14 AVENUE 8E	-0.500000	INCAPACITATING_INJURY
2/4/2008	14 AVENUE D	14 COUNTY 11TH ST	-0.400000	INCAPACITATING_INJURY
2/4/2008	14 AVENUE B	14 16TH ST	0.000000	INCAPACITATING_INJURY
1/29/2008	14 24TH PL	14 MARION AVE	-0.010000	INCAPACITATING_INJURY
1/28/2008	14 AVENUE 4E	14 COUNTY 13TH ST	0.000000	INCAPACITATING_INJURY
1/28/2008	14 GISS PKWY	14 MAIN ST	-0.009500	INCAPACITATING_INJURY
1/23/2008	14 COUNTY 18TH ST	14 AVENUE D	0.000000	INCAPACITATING_INJURY
1/12/2008	14 16TH ST	14 6TH AVE	-0.001900	INCAPACITATING_INJURY
1/12/2008	14 COUNTY 12TH ST	14 AVENUE 3 1/2E	0.000000	INCAPACITATING_INJURY
1/11/2008	SB008 1	14 18TH ST	-0.037900	INCAPACITATING_INJURY
1/9/2008	14 24TH ST	14 AVENUE 5E	0.029000	INCAPACITATING_INJURY
1/9/2008	14 8TH AVE	14 36TH ST	0.000000	INCAPACITATING_INJURY
1/2/2008	14 AVENUE C	14 24TH ST	0.113600	INCAPACITATING_INJURY
12/29/2007	U 095	M048	0.000000	INCAPACITATING_INJURY



Crash Date	Crash Road	Nearby Crossroad	Crash Offset	Injury Severity
12/27/2007	U 095	14 26TH ST	-0.018900	INCAPACITATING_INJURY
12/24/2007	14 AVENUE 69E	14 COUNTY 2ND ST	-1.300000	INCAPACITATING_INJURY
12/24/2007	14 AVENUE C	14 24TH ST	0.000000	INCAPACITATING_INJURY
12/21/2007	I 008	M061	0.500000	INCAPACITATING_INJURY
12/19/2007	14 28TH DR	14 30TH PL	-0.007600	INCAPACITATING_INJURY
12/19/2007	14 HILLSIDE PL	14 15TH AVE	-0.005700	INCAPACITATING_INJURY
12/19/2007	14 16TH ST	I 008002A	0.000000	INCAPACITATING_INJURY
12/14/2007	14 40TH ST	14 CASSIDY DR	0.010800	INCAPACITATING_INJURY
12/14/2007	14 32ND ST	14 CATALINA DR	0.015200	INCAPACITATING_INJURY
12/7/2007	14 COUNTY 15TH ST	14 AVENUE D	0.000000	INCAPACITATING_INJURY
12/6/2007	14 AVENUE 24E	14 COUNTY 9TH ST	-0.529900	INCAPACITATING_INJURY
12/6/2007	U 095	14 COUNTY 14TH ST	0.000000	INCAPACITATING_INJURY
11/30/2007	SB008 1	14 14TH ST	0.013300	INCAPACITATING_INJURY
11/28/2007	I 008 2	14 AVENUE 9E	0.000000	INCAPACITATING_INJURY
11/24/2007	14 COUNTY 19TH ST	14 AVENUE I	0.004700	INCAPACITATING_INJURY
11/22/2007	I 008	M038	0.500000	INCAPACITATING_INJURY
11/21/2007	I 008	M004	0.200000	INCAPACITATING_INJURY
11/21/2007	14 24TH ST	14 22ND DR	-0.041100	INCAPACITATING_INJURY
11/8/2007	14 GISS PKWY	I 008001C	0.000000	INCAPACITATING_INJURY
11/7/2007	U 095	M040	0.300000	INCAPACITATING_INJURY
11/1/2007	U 095	M027	0.800000	INCAPACITATING_INJURY
10/25/2007	14 AVENUE A	14 24TH ST	-0.098100	INCAPACITATING_INJURY
10/25/2007	14 32ND ST	14 AVENUE 5E	-0.106100	INCAPACITATING_INJURY
10/23/2007	14 4TH AVE	14 37TH ST	0.001900	INCAPACITATING_INJURY
10/22/2007	14 AVENUE 3E	14 42ND ST	-0.037900	INCAPACITATING_INJURY
10/10/2007	14 AVENUE A	14 COUNTY 14TH ST	0.172000	INCAPACITATING_INJURY
10/9/2007	14 8TH ST	14 21ST AVE	0.000000	INCAPACITATING_INJURY
10/5/2007	14 16TH ST	14 3RD AVE	0.044500	INCAPACITATING_INJURY
10/5/2007	14 20TH ST	14 27TH AVE	0.000000	INCAPACITATING_INJURY
9/28/2007	14 32ND ST	14 RANCHO WAY	0.000000	INCAPACITATING_INJURY
9/27/2007	14 32ND ST	U 095	0.000000	INCAPACITATING_INJURY
9/26/2007	14 1ST AVE	14 19TH ST	0.000000	INCAPACITATING_INJURY
9/25/2007	14 AVENUE 2E	14 24TH ST	0.021000	INCAPACITATING_INJURY
9/20/2007	14 8TH ST	14 7TH AVE	0.000000	INCAPACITATING_INJURY
9/19/2007	14 32ND ST	14 AVENUE 3E	-0.155300	INCAPACITATING_INJURY



Crash Date	Crash Road	Nearby Crossroad	Crash Offset	Injury Severity
9/19/2007	14 AVENUE A	14 12TH ST	-0.001900	INCAPACITATING_INJURY
9/15/2007	14 16TH ST	14 7TH AVE	0.000000	INCAPACITATING_INJURY
9/7/2007	SB008 1	14 AVENUE 3 1/2E	0.000000	INCAPACITATING_INJURY
9/3/2007	I 008 1	14 FORTUNA RD	-0.500000	INCAPACITATING_INJURY
9/3/2007	14 43RD LN	14 JASMINE AVE	0.037900	INCAPACITATING_INJURY
8/25/2007	14 AVENUE G	14 COUNTY 11TH ST	0.094700	INCAPACITATING_INJURY
8/25/2007	14 AVENUE 20E	14 DOME VALLEY RD	-0.022700	INCAPACITATING_INJURY
8/24/2007	I 008 0	M043	0.800000	INCAPACITATING_INJURY
8/24/2007	14 27TH AVE	14 21ST LN	0.037900	INCAPACITATING_INJURY
8/21/2007	14 45TH DR	14 MONTANA AVE	0.000000	INCAPACITATING_INJURY
8/20/2007	14 5TH AVE	14 13TH ST	0.000000	INCAPACITATING_INJURY
8/17/2007	14 1ST ST	14 18TH AVE	-0.003800	INCAPACITATING_INJURY
8/12/2007	14 MARTINEZ LAKE RD	14 FISHERS LANDING RD	0.000000	INCAPACITATING_INJURY
8/3/2007	14 GILA RIDGE RD	14 AVENUE 2E	0.000000	INCAPACITATING_INJURY
7/24/2007	14 AVENUE D	14 COUNTY 9TH ST	0.000000	INCAPACITATING_INJURY
7/13/2007	14 APACHE LN	14 CLIP ST	0.000000	INCAPACITATING_INJURY
7/11/2007	14 AVENUE F	14 COUNTY 14TH ST	0.300000	INCAPACITATING_INJURY
7/6/2007	14 AVENUE G	14 COUNTY 15TH ST	0.054900	INCAPACITATING_INJURY
6/29/2007	14 WEST MAIN CANAL RD	14 SOMERTON AVE	0.500000	INCAPACITATING_INJURY
6/27/2007	14 16TH ST	14 ARIZONA AVE	0.000000	INCAPACITATING_INJURY
6/25/2007	14 SUNSET TERRACE BLVD	14 ARABY RD	-0.009800	INCAPACITATING_INJURY
6/23/2007	14 AVENUE 7E	14 MISSION ST	0.064400	INCAPACITATING_INJURY
6/22/2007	14 COUNTY 12TH ST	14 AVENUE 4E	0.000000	INCAPACITATING_INJURY
6/18/2007	14 AVENUE 4E	14 40TH ST	0.041700	INCAPACITATING_INJURY
6/12/2007	14 16TH ST	14 AVENUE B	-0.113600	INCAPACITATING_INJURY
6/12/2007	SB008 1	14 17TH ST	-0.036000	INCAPACITATING_INJURY
5/28/2007	14 AVENUE B	14 COUNTY 16TH ST	-0.400000	INCAPACITATING_INJURY
5/26/2007	14 8TH ST	14 CASTLE DOME AVE	0.039800	INCAPACITATING_INJURY
5/25/2007	U 095	M024	0.000000	INCAPACITATING_INJURY
5/21/2007	SB008 1	14 24TH ST	0.000000	INCAPACITATING_INJURY
5/18/2007	I 008 0	M042	0.900000	INCAPACITATING_INJURY
5/3/2007	14 32ND ST	14 AVENUE 8E	-0.011400	INCAPACITATING_INJURY
5/2/2007	14 GISS PKWY	14 PRISON HILL RD	0.000000	INCAPACITATING_INJURY
5/1/2007	14 32ND ST	14 ARABY RD	0.000000	INCAPACITATING_INJURY



Crash Date	Crash Road	Nearby Crossroad	Crash Offset	Injury Severity
4/22/2007	14 MCKENZIE AVE	14 31ST ST	0.007000	INCAPACITATING_INJURY
4/19/2007	U 095	14 24TH ST	0.000000	INCAPACITATING_INJURY
4/15/2007	14 4TH AV EXTENSION	14 COUNTY 14TH ST	0.500000	INCAPACITATING_INJURY
4/13/2007	14 ARIZONA AVE	14 17TH ST	-0.011000	INCAPACITATING_INJURY
4/10/2007	14 AVENUE 32E	14 COUNTY 9TH ST	0.300000	INCAPACITATING_INJURY
4/10/2007	14 COUNTY 10TH ST	14 AVENUE 3E	0.500000	INCAPACITATING_INJURY
4/10/2007	14 16TH ST	I 008002J	-0.006600	INCAPACITATING_INJURY
4/7/2007	14 32ND ST	14 FORTUNA AVE	0.052500	INCAPACITATING_INJURY
4/2/2007	14 COUNTY 16TH ST	14 AVENUE 1E	0.000000	INCAPACITATING_INJURY
4/2/2007	I 008	M013	0.600000	INCAPACITATING_INJURY
4/2/2007	I 008	M020	0.100000	INCAPACITATING_INJURY
3/31/2007	I 008	M018	0.800000	INCAPACITATING_INJURY
3/31/2007	14 AVENUE B	14 COUNTY 19TH ST	-0.250000	INCAPACITATING_INJURY
3/27/2007	U 095	M025	0.600000	INCAPACITATING_INJURY
3/24/2007	U 095	M004	0.000000	INCAPACITATING_INJURY
3/21/2007	U 095	14 COUNTY 14TH ST	0.000000	INCAPACITATING_INJURY
3/16/2007	14 AVENUE C	14 COUNTY 14TH ST	0.000000	INCAPACITATING_INJURY
3/14/2007	14 24TH ST	14 22ND DR	0.000000	INCAPACITATING_INJURY
3/13/2007	14 8TH ST	14 DORA AVE	-0.000600	INCAPACITATING_INJURY
3/9/2007	U 095	M078	0.800000	INCAPACITATING_INJURY
3/8/2007	14 GISS PKWY	14 GILA ST	-0.003200	INCAPACITATING_INJURY
3/6/2007	I 008 0	M019	0.500000	INCAPACITATING_INJURY
3/6/2007	14 SOMERTON AVE	14 COUNTY 14TH ST	0.000000	INCAPACITATING_INJURY
3/6/2007	14 COUNTY 14TH ST	14 AVENUE 5E	0.000000	INCAPACITATING_INJURY
3/6/2007	14 AVENUE B	14 8TH ST	0.000000	INCAPACITATING_INJURY
3/5/2007	I 008 2	14 HENSLEYS BLVD	-0.037100	INCAPACITATING_INJURY
2/25/2007	14 COUNTY 5E AVE	14 45TH ST	0.000000	INCAPACITATING_INJURY
2/22/2007	14 AVENUE 2E	14 16TH ST	-0.015200	INCAPACITATING_INJURY
2/13/2007	I 008 2	14 CAMINO DEL SOL	0.000000	INCAPACITATING_INJURY
2/13/2007	14 24TH ST	14 AVENUE 2 1/2E	0.056800	INCAPACITATING_INJURY
2/11/2007	14 AVENUE D	14 COUNTY 13TH ST	-0.250000	INCAPACITATING_INJURY
2/11/2007	14 16TH ST	14 YUMA PALMS PKWY	0.000000	INCAPACITATING_INJURY
2/10/2007	14 COUNTY 10TH ST	14 AVENUE 4E	0.200000	INCAPACITATING_INJURY
2/3/2007	14 AVENUE A	14 COUNTY 14TH ST	0.000000	INCAPACITATING_INJURY
2/1/2007	U 095	M030	0.100000	INCAPACITATING_INJURY



Crash Date	Crash Road	Nearby Crossroad	Crash Offset	Injury Severity
1/31/2007	14 4TH AVE	14 24TH ST	-0.003800	INCAPACITATING_INJURY
1/29/2007	14 16TH ST	14 6TH AVE	-0.009500	INCAPACITATING_INJURY
1/28/2007	14 22ND LN	14 38TH AVE	-0.018900	INCAPACITATING_INJURY
1/26/2007	14 AVENUE 64E	14 PALOMAS RD	0.000000	INCAPACITATING_INJURY
1/21/2007	14 32ND ST	14 AVENUE 10E	-0.151500	INCAPACITATING_INJURY
1/19/2007	14 AVENUE B	14 16TH ST	0.000000	INCAPACITATING_INJURY
1/18/2007	14 9TH PL	14 13TH AVE	0.000000	INCAPACITATING_INJURY
1/17/2007	U 095	M049	0.300000	INCAPACITATING_INJURY
1/17/2007	14 1ST AVE	14 25TH ST	0.006600	INCAPACITATING_INJURY
1/12/2007	I 008 2	14 HENSLEY BLVD	-0.150000	INCAPACITATING_INJURY
1/4/2007	14 AVENUE 2E	14 GILA RIDGE RD	0.000000	INCAPACITATING_INJURY
1/3/2007	SB008 1	14 22ND ST	0.010400	INCAPACITATING_INJURY
1/2/2007	U 095	M077	0.600000	INCAPACITATING_INJURY
1/1/2007	I 008 0	M046	0.500000	INCAPACITATING_INJURY



APPENDIX B – 2007-2011 FATAL AND INCAPACITATING INJURY CRASH DATA – PEDESTRIAN AND BICYCLE CRASHES

Crash Date	Crash Road	Nearby Crossroad	Crash Offset	Injury Severity
12/13/2011	14 24TH ST	14 AVENUE A	0.113600	FATAL
11/24/2011	I 008	M001	0.200000	FATAL
11/16/2011	14 16TH ST	14 10TH AVE	0.000000	FATAL
10/13/2011	14 SOMERTON AVE	14 MAIN ST	0.000000	FATAL
10/3/2011	27TH ST	34TH AVE	0.071000	FATAL
4/29/2011	14 8TH ST	14 21ST AVE	-0.004900	FATAL
1/13/2011	AVENUE 9E	ARABY BLAISDELL RD	0.018900	FATAL
11/16/2010	14 AVENUE B	14 5TH ST	-0.000900	FATAL
9/25/2010	14 4TH AVE	14 5TH ST	0.004700	FATAL
3/4/2010	AVENUE B	13TH LN	0.000000	FATAL
9/24/2009	14 COUNTY 15TH ST	14 SOMERTON AVE	0.094700	FATAL
3/30/2009	14 24TH ST	U 095	0.094700	FATAL
1/25/2009	SB008 1	14 AVENUE 3 1/2E	-0.104200	FATAL
6/30/2008	14 8TH ST	14 13TH AVE	-0.000800	FATAL
4/26/2008	14 B ST	14 4TH DR	0.000000	FATAL
4/2/2008	14 ORANGE AVE	14 9TH ST	0.007200	FATAL
2/5/2008	U 095	M009	0.600000	FATAL
12/16/2007	14 AVENUE 3E	14 COUNTY 19TH ST	0.100000	FATAL
11/11/2007	U 095	M004	0.500000	FATAL
11/10/2007	U 095	M024	0.100000	FATAL
8/20/2007	SB008 1	14 12TH ST	-0.074400	FATAL
7/28/2007	I 008 1	14 AVENUE 10E	0.200000	FATAL
5/14/2007	14 AVENUE A	14 DESERT LAKES DR	0.006800	FATAL
3/19/2007	14 URTUZUASTEGUI ST	14 CESAR CHAVEZ ST	0.014200	FATAL
1/11/2007	SB008 1	14 18TH ST	0.007600	FATAL
12/31/2011	14 28TH ST	14 4TH AVE	-0.018900	INCAPACITATING_INJURY
12/19/2011	24TH ST	AVENUE 7 1/2E	0.000000	INCAPACITATING_INJURY
12/19/2011	14 14TH ST	14 4TH AVE	-0.007000	INCAPACITATING_INJURY
12/7/2011	14 18TH AVE	14 24TH ST	-0.005700	INCAPACITATING_INJURY
11/15/2011	14 B ST	U 095	0.000000	INCAPACITATING_INJURY



Crash Date	Crash Road	Nearby Crossroad	Crash Offset	Injury Severity
9/13/2011	14 8TH ST	14 7TH AVE	0.004700	INCAPACITATING_INJURY
9/12/2011	14 1ST ST	14 6TH AVE	0.000000	INCAPACITATING_INJURY
7/18/2011	14 32ND ST	14 ARIZONA AVE	0.000000	INCAPACITATING_INJURY
4/18/2011	14 24TH ST	14 17TH AVE	0.000000	INCAPACITATING_INJURY
2/10/2011	14 24TH ST	14 5TH AVE	0.000000	INCAPACITATING_INJURY
11/15/2010	14 AVENUE A	14 17TH ST	0.000000	INCAPACITATING_INJURY
9/9/2010	14 14TH ST	14 10TH AVE	0.009500	INCAPACITATING_INJURY
7/12/2010	14 16TH ST	14 5TH AVE	0.000000	INCAPACITATING_INJURY
6/13/2010	14 VIRGINIA DR	14 25TH ST	0.050600	INCAPACITATING_INJURY
5/11/2010	14 2ND AVE	14 19TH ST	0.000000	INCAPACITATING_INJURY
2/17/2010	14 1ST AVE	14 9TH ST	-0.010400	INCAPACITATING_INJURY
2/4/2010	14 1ST ST	14 15TH AVE	0.013300	INCAPACITATING_INJURY
2/1/2010	14 4TH AVE	14 10TH ST	-0.066300	INCAPACITATING_INJURY
1/30/2010	14 8TH ST	14 21ST AVE	0.000000	INCAPACITATING_INJURY
11/18/2009	U 095	14 26TH ST	-0.001900	INCAPACITATING_INJURY
10/22/2009	14 2ND ST	SB008 1	0.009500	INCAPACITATING_INJURY
9/13/2009	14 8TH ST	14 AVENUE A	0.028400	INCAPACITATING_INJURY
4/10/2009	14 24TH ST	14 AVENUE A	0.000000	INCAPACITATING_INJURY
3/19/2009	14 AVENUE C	14 CRANE ST	-0.003800	INCAPACITATING_INJURY
3/17/2009	U 095	M025	0.500000	INCAPACITATING_INJURY
2/21/2009	U 095	14 26TH ST	0.000000	INCAPACITATING_INJURY
12/18/2008	14 21ST ST	14 WALNUT AVE	-0.004900	INCAPACITATING_INJURY
12/6/2008	14 8TH ST	14 12TH AVE	0.013300	INCAPACITATING_INJURY
11/24/2008	14 8TH ST	14 MAGNOLIA AVE	-0.033000	INCAPACITATING_INJURY
10/24/2008	14 MERRILL AVE	14 ZAPATA ST	0.000000	INCAPACITATING_INJURY
10/9/2008	14 22ND ST	14 ARIZONA AVE	-0.001900	INCAPACITATING_INJURY
9/22/2008	14 AVENUE B	14 15TH ST	-0.063300	INCAPACITATING_INJURY
9/11/2008	14 17TH AVE	14 5TH ST	-0.031800	INCAPACITATING_INJURY
6/10/2008	14 COUNTY 8TH ST	14 ECHO AVE	0.000000	INCAPACITATING_INJURY
4/3/2008	14 32ND ST	14 28TH DR	0.000000	INCAPACITATING_INJURY
3/28/2008	14 15TH ST	SB008 1	0.014600	INCAPACITATING_INJURY
3/26/2008	SB008 1	14 19TH ST	0.001900	INCAPACITATING_INJURY
3/19/2008	I 008 2	14 AVENUE 14E	-0.200000	INCAPACITATING_INJURY
3/18/2008	14 24TH ST	14 7TH AVE	0.000000	INCAPACITATING_INJURY
3/17/2008	SB008 1	14 24TH ST	0.001900	INCAPACITATING_INJURY



Crash Date	Crash Road	Nearby Crossroad	Crash Offset	Injury Severity
2/14/2008	14 AVENUE C	14 LINDA LN	0.018900	INCAPACITATING_INJURY
2/13/2008	SB008 1	14 13TH ST	-0.037900	INCAPACITATING_INJURY
1/29/2008	14 24TH PL	14 MARION AVE	-0.010000	INCAPACITATING_INJURY
1/28/2008	14 GISS PKWY	14 MAIN ST	-0.009500	INCAPACITATING_INJURY
1/12/2008	14 16TH ST	14 6TH AVE	-0.001900	INCAPACITATING_INJURY
12/19/2007	14 28TH DR	14 30TH PL	-0.007600	INCAPACITATING_INJURY
12/14/2007	14 40TH ST	14 CASSIDY DR	0.010800	INCAPACITATING_INJURY
10/25/2007	14 32ND ST	14 AVENUE 5E	-0.106100	INCAPACITATING_INJURY
10/5/2007	14 20TH ST	14 27TH AVE	0.000000	INCAPACITATING_INJURY
9/19/2007	14 AVENUE A	14 12TH ST	-0.001900	INCAPACITATING_INJURY
9/3/2007	I 008 1	14 FORTUNA RD	-0.500000	INCAPACITATING_INJURY
8/12/2007	14 MARTINEZ LAKE RD	14 FISHERS LANDING RD	0.000000	INCAPACITATING_INJURY
3/24/2007	U 095	M004	0.000000	INCAPACITATING_INJURY
3/13/2007	14 8TH ST	14 DORA AVE	-0.000600	INCAPACITATING_INJURY
3/8/2007	14 GISS PKWY	14 GILA ST	-0.003200	INCAPACITATING_INJURY
1/17/2007	14 1ST AVE	14 25TH ST	0.006600	INCAPACITATING_INJURY
1/12/2007	I 008 2	14 HENSLEY BLVD	-0.150000	INCAPACITATING_INJURY



APPENDIX C – ARIZONA STATE HIGHWAY SYSTEM BRIDGE FACILITIES (PER ADOT BRIDGE INVENTORY)

Str. No.	Rt. No.		Rt. MP	Bridge Name	Dist.	Original Construction Project No.	Year Built	Br. Type		No. of Spans	Max. Span Length (Ft)	Struct. Length (Ft)	Skw.	Rdwy. Appr. Width (Ft)	Br. Roadway Width (Ft)	Allow. Vert. Clernc. (Ft)	Overlay Inch	Bridge Rail Type			Invt. Rtg.		Opr. Rtg.		Suffic. Rtg.	
1700	8		0.01	Colorado Rv Viadt EB	Y	I-8-9(2)170	1978	6	6	15	214	2749	0	38	38.0	17.83	0	9	1	1	2	43	2	71		98.00
1701	8		0.01	Colorado River Viaduct WB	Y	I-8-9(2)170	1978	6	6	14	220	2668	0	38	38.0	18.25	0	4	1	1	2	36	2	59		96.00
486	8	B	0.01	Colorado River Br	Y		1956	4	2	5	180	837	0	62	50.0	0.00	0	5	0	1	2	46	2	82	S	46.54
487	8	B	0.11	Yuma Canal Bridge	Y	NFA-407(56)A	1956	3	2	3	70	146	40	63	72.0	0.00	0	5	0	0	2	46	2	78		83.96
1322	8		0.58	4th St TI OP EB	Y	I-8-1(49)	1969	2	6	2	104	205	3	38	38.0	30.20	0	1	1	1	2	50	2	84		96.00
1323	8		0.58	4th St TI OP WB	Y	I-8-1(49)	1969	2	6	2	102	204	3	38	47.0	30.25	0	1	1	1	2	50	2	84		94.00
2075	8		0.58	4th Street SPRR UP	Y	IG-8-1(62)C	1976	5	5	4	52	167	13	101	101.0	15.33	0	1	0	0	7	0	7	0		
1380	8		2.23	US 95 TI UP	Y	I-8-1(49)	1970	2	6	2	132	260	28	64	64.0	16.25	0	9	1	1	2	53	2	88		91.25
2371	8		2.23	US 95 Ped OP	Y	F-063-1-511	1993	6	2	2	132	262	29	0	8.0	17.96	0	6	0	0	8	0	8	0		
1381	8		2.99	Ave 2E UP	Y	I-8-1(49)	1970	2	6	2	127	258	15	76	72.0	16.25	0	2	1	1	2	60	2	83		94.20
2681	8		3.99	Ave 3E TI OP EB	Y	IM-008-A-(14)	2003	6	6	2	111	213	13	42	42.0	18.00	0	9	1	1	2	52	2	96		96.87
2682	8		3.99	Ave 3E TI OP WB	Y	IM-008-A-(14)	2003	6	6	2	111	213	13	42	42.0	18.08	0	9	1	1	2	52	2	96		96.89
1277	8		7.67	Araby Rd TI OP EB	Y	I-IG-8-1(42)	1968	2	4	4	52	147	8	38	38.0	15.19	0	1	1	1	2	46	2	77	F	94.00
1278	8		7.67	Araby Rd TI OP WB	Y	I-IG-8-1(42)	1968	2	4	4	52	147	8	38	38.0	15.29	0	1	1	1	2	46	2	77	F	94.00
1279	8		8.69	Fortuna SPRR OP EB	Y	I-IG-8-1(42)	1968	4	2	3	105	281	60	38	33.0	23.51	0	1	1	1	2	38	2	64		77.63
1280	8		8.70	Fortuna SPRR OP WB	Y	I-IG-8-1(42)	1968	4	2	3	105	281	60	38	33.0	23.19	0	1	1	1	2	38	2	64		78.69
1188	8		9.43	E Yuma TI OP EB	Y	I-IG-8-1(42)	1968	4	2	4	101	313	46	38	33.0	18.16	0	1	1	1	2	73	2	99		89.86
1281	8		9.44	E Yuma TI OP WB	Y	I-IG-8-1(42)	1968	4	2	4	101	313	46	38	33.0	17.64	0	1	1	1	2	42	2	71		89.91
2432	8		12.20	Fortuna Rd TI UP	Y	NH-8-1(95)	1997	6	2	2	131	268	0	84	84.0	16.76	0	9	1	1	2	50	2	99		90.03
2117	8		14.25	Foothills Blvd TI UP	Y	IR-6-1(88)	1990	6	2	2	131	267	9	80	84.3	16.44	0	9	1	1	2	44	2	99		97.24
1190	8		14.87	Fortuna Wash Br EB	Y	I-8-1(38)	1966	6	2	4	53	215	20	38	37.7	0.00	1	1	1	1	2	46	2	53		96.57
1191	8		14.87	Fortuna Wash Br WB	Y	I-8-1(38)	1967	6	2	4	53	215	20	38	37.7	0.00	1	1	1	1	2	46	2	53		96.54
1192	8		14.98	Frontage Rd OP EB	Y	I-8-1(38)	1966	2	1	3	35	94	0	38	37.7	15.57	1	1	1	1	2	42	2	70	F	92.55
1193	8		14.98	Frontage Rd OP WB	Y	I-8-1(38)	1966	2	1	3	35	94	0	38	37.7	15.91	1	1	1	1	2	42	2	70	F	92.51
5228	8		16.41	RCB WB	Y	I-8-1(38)	1967	2	19	4	10	49	30	38	0.0	0.00	0				2	36	2	36		97.49
7082	8		16.41	Dry Wash RCB EB	Y	BR-8-A(2)	2002	2	19	4	10	44	0	38	0.0	0.00	0				2	36	2	36		97.49
5229	8		16.79	RCB WB	Y	I-8-1(38)	1967	2	19	3	10	45	45	38	0.0	0.00	0				2	36	2	36		97.49
1566	8		16.85	Dublin Wash Br EB	Y	NRH-8(8)B	1927	2	1	2	20	40	45	38	39.2	0.00	0	9	1	1	2	18	2	31		74.20
6743	8		16.85	Insp Sta Ramp RCB EB	Y	I-8-1(77)	1982	2	19	2	12	38	49	34	0.0	0.00	0	9	1	1	2	36	2	36		97.60
5230	8		17.76	RCB EB	Y	I-8-1(21)	1967	2	19	3	10	32	0	38	0.0	0.00	0				2	36	2	36		97.49
5231	8		17.77	RCB WB	Y	I-8-1(21)	1967	2	19	3	10	32	0	38	0.0	0.00	0				2	36	2	36		97.49
303	8		18.12	Wash Br EB	Y	FAP-82B	1927	2	1	2	13	28	3	38	63.2	0.00	6	6	1	1	2	27	2	27		90.03



Str. No.	Rt. No.		Rt. MP	Bridge Name	Dist.	Original Construction Project No.	Year Built	Br. Type		No. of Spans	Max. Span Length (Ft)	Struct. Length (Ft)	Skw.	Rdwy. Appr. Width (Ft)	Br. Roadway Width (Ft)	Allow. Vert. Clernc. (Ft)	Overlay Inch	Bridge Rail Type			Inv. Rtg.		Opr. Rtg.		Suffic. Rtg.	
6714	8		18.50	RCB EB	Y	FAP-82B	1929	2	19	2	10	29	45	38	0.0	0.00	0				2	36	2	36		93.72
971	8		18.80	Telpas OP WB Over EB	Y	I-8-1(21)	1967	4	2	3	159	267	0	38	42.1	19.64	0	9	1	1	2	44	2	74		93.42
972	8		20.40	Telpas OP WB Over EB	Y	I-8-1(21)	1967	4	2	3	103	249	51	38	42.1	16.28	0	9	1	1	2	40	2	66		92.37
1324	8		21.04	Dome Vly Rd TI UP EB	Y	I-8-1(35)	1969	2	4	3	70	183	29	34	34.0	19.41	0	1	1	1	2	63	2	37		95.92
1325	8		21.06	Dome Vly Rd TI UP WB	Y	I-8-1(35)	1969	2	4	3	68	155	17	34	34.0	16.23	0	1	1	1	2	43	2	73		94.88
5232	8		21.63	RCB EB & WB	Y	I-8-1(35)	1969	2	19	2	12	25	0	150	0.0	0.00	0				2	36	2	36		65.00
1326	8		22.90	Red Top Wash Br EB	Y	I-8-1(35)	1967	5	2	2	76	157	20	38	38.0	0.00	0	1	1	1	2	43	2	56		97.54
1327	8		22.90	Red Top Wash Br WB	Y	I-8-1(35)	1967	5	2	2	76	157	20	38	38.0	0.00	0	1	1	1	2	43	2	56		97.51
1328	8		24.10	Ligurta Wash Br EB	Y	I-8-1(35)	1967	6	2	6	78	469	30	38	38.0	0.00	0	1	1	1	2	33	2	92		96.09
1329	8		24.10	Ligurta Wash Br WB	Y	I-8-1(35)	1967	6	2	6	78	469	30	38	38.0	0.00	0	1	1	1	2	33	2	92		96.06
5233	8		26.53	RCB EB & WB	Y	I-8-1(32)	1969	2	19	3	10	32	0	150	0.0	0.00	0				2	36	2	36		81.95
1330	8		26.70	Adonde Rd OP EB	Y	I-8-1(32)	1965	2	1	3	40	107	11	38	38.0	18.43	0	1	1	1	2	34	2	57	F	92.73
1331	8		26.70	Adonde Rd OP WB	Y	I-8-1(32)	1965	2	1	3	40	107	11	38	38.0	19.07	1	1	1	1	2	35	2	58	F	93.21
5234	8		29.74	RCB EB & WB	Y	I-8-1(32)	1969	2	19	2	10	21	0	150	0.0	0.00	0				2	36	2	36		65.00
1332	8		30.80	Wellton TI UP	Y	I-8-1(32)	1965	2	4	4	81	254	15	40	40.0	16.23	0	1	1	1	2	46	2	77	F	95.59
1333	8		31.50	Wellton Canal Br EB	Y	I-8-1(32)	1967	2	6	3	51	109	0	38	38.0	0.00	0	9	1	1	2	36	2	58		97.10
1334	8		31.50	Wellton Canal Br WB	Y	I-8-1(32)	1967	2	6	3	51	109	0	38	38.0	0.00	0	9	1	1	2	36	2	58		97.13
5236	8		32.37	RCB EB & WB	Y	I-8-1(29)	1969	2	19	3	10	32	0	76	0.0	0.00	0				2	36	2	36		81.94
1335	8		32.89	Ave 31E UP	Y	I-8-1(29)	1965	2	6	4	85	262	16	26	26.0	16.26	0	1	0	0	2	35	2	59		96.68
5237	8		33.91	RCB EB & WB	Y	I-8-1(29)	1969	2	19	3	10	32	0	76	0.0	0.00	0				2	36	2	36		81.94
1336	8		34.91	Asher UP	Y	I-8-1(29)	1964	5	2	9	78	613	5	28	28.0	20.11	0	3	0	0	2	36	2	96	F	93.88
2738	8		36.40	Mohawk Canal Br OP EB	Y	-800-A(003)A	2003	5	2	1	110	252	55	38	42.0	0.00	0	9	1	1	2	38	2	99		97.55
2739	8		36.40	Mohawk Canal Br OP WB	Y	-008-A(003)A	2003	5	2	1	114	253	55	42	42.0	0.00	0	9	1	1	2	48	2	99		96.69
1194	8		37.98	Antelope Hill TI UP	Y	I-8-1(26)	1967	4	2	4	81	258	14	32	30.0	16.21	0	9	1	1	2	38	2	55	F	95.80
5239	8		40.71	RCB EB & WB	Y	I-8-1(26)	1966	2	19	2	10	21	0	76	0.0	0.00	0				2	36	2	36		72.44
1195	8		42.08	Tacna TI UP	Y	I-8-1(26)	1967	4	2	4	79	254	10	32	33.0	16.46	0	9	1	1	2	38	2	55	F	95.72
5241	8		42.62	RCB EB & WB	Y	I-8-1(26)	1966	2	19	2	10	21	0	76	0.0	0.00	0				2	36	2	36		72.44
5243	8		44.61	RCB EB & WB	Y	I-8-1(25)	1965	2	19	4	10	49	30	76	0.0	0.00	0				2	36	2	36		72.44
5245	8		45.81	RCB EB & WB	Y	I-8-1(25)	1965	2	19	4	10	43	0	76	0.0	0.00	0				2	36	2	36		72.44
5247	8		46.28	RCB EB	Y	I-8-1(25)	1965	2	19	6	10	64	0	38	0.0	0.00	0				2	36	2	36		97.56
5248	8		46.28	RCB WB	Y	I-8-1(25)	1965	2	19	6	10	64	0	38	0.0	0.00	0				2	36	2	36		97.56
5249	8		52.11	RCB EB & WB	Y	I-IG-8-1(18)	1966	2	19	3	10	45	45	76	0.0	0.00	0				2	36	2	36		72.44
1135	8		54.85	Mohawk SPRR OP EB	Y	I-IG-8-1(18)	1966	4	2	3	58	153	30	38	38.0	23.85	2	3	0	0	2	36	2	60		95.24



Str. No.	Rt. No.		Rt. MP	Bridge Name	Dist.	Original Construction Project No.	Year Built	Br. Type		No. of Spans	Max. Span Length (Ft)	Struct. Length (Ft)	Skw.	Rdwy. Appr. Width (Ft)	Br. Roadway Width (Ft)	Allow. Vert. Clernc. (Ft)	Overlay Inch	Bridge Rail Type			Invt. Rtg.		Opr. Rtg.		Suffic. Rtg.	
1136	8		54.85	Mohawk SPRR OP WB	Y	I-IG-8-1(18)	1966	4	2	3	58	153	30	38	38.0	24.21	1	3	0	0	2	36	2	60		95.24
6334	8		54.85	RCB FR	Y	I-8-1 (17)	1964	2	19	2	10	21	0	30	0.0	0.00	0				2	36	2	36		88.29
784	8		54.90	Mohawk TI OP EB	Y	I-8-1(17)	1963	2	4	3	56	158	51	38	38.0	15.17	2	9	1	1	2	42	2	71	F	93.54
785	8		54.90	Mohawk TI OP WB	Y	I-8-1(17)	1963	2	4	3	56	158	49	38	38.0	16.78	2	9	1	1	2	42	2	71	F	93.54
5251	8		55.33	RCB EB-WB & Ramps	Y	IN-55(6)	1955	2	19	2	10	21	0	76	0.0	0.00	0				2	36	2	36		83.00
5253	8		55.54	RCB EB-WB	Y	IN-55(6)	1955	2	19	4	10	43	0	76	0.0	0.00	0				2	36	2	36		69.87
5255	8		59.55	RCB EB	Y	IN-55(6)	1955	2	19	5	10	53	0	38	0.0	0.00	0				2	36	2	36		97.56
5256	8		59.55	RCB WB	Y	I-8-1(13)	1962	2	19	5	10	53	0	38	0.0	0.00	0				2	36	2	36		97.56
5257	8		59.97	San Cristobal RCB EB	Y	IN-55(6)	1955	2	19	6	10	64	0	38	0.0	0.00	0				2	36	2	36		97.56
5258	8		59.97	San Cristobal RCB WB	Y	I-8-1(13)	1962	2	19	6	10	64	0	38	0.0	0.00	0				2	36	2	36		97.56
681	8		67.43	Dateland TI OP EB	Y	I-8-1(10)	1962	2	1	3	40	108	24	38	37.8	13.92	2	8	1	1	2	45	2	76	F	93.00
682	8		67.43	Dateland TI OP WB	Y	I-8-1(10)	1962	2	1	3	40	108	24	38	37.8	13.86	2	8	1	1	2	45	2	76	F	93.00
5259	8		72.18	RCB EB & WB	Y	IN-2-1(1)	1956	2	19	5	10	53	0	38	0.0	0.00	0				2	36	2	36		69.87
683	8		73.48	Aztec TI OP EB	Y	I-8-1(8)	1962	2	1	3	36	97	0	38	39.8	14.46	1	9	1	1	2	39	2	65	F	94.00
684	8		73.48	Aztec TI OP WB	Y	I-8-1(8)	1962	2	1	3	36	97	0	38	39.8	14.51	1	9	1	1	2	39	2	65	F	94.00
5261	8		75.12	Canyon Diablo RCB	Y	IN-002-1(2)	1956	2	19	6	10	74	30	38	0.0	0.00	0				2	36	2	36		69.87
685	8		78.40	Spot Rd TI OP EB	Y	I-8-1(8)	1962	2	1	3	36	97	0	38	39.9	13.90	1	9	1	1	2	42	2	69	F	94.00
686	8		78.40	Spot Rd TI OP WB	Y	I-8-1(8)	1962	2	1	3	36	97	0	38	39.9	13.85	1	9	1	1	2	42	2	69	F	94.00
2548	95		1.03	Main Drain Bridge	Y	063-1-(12)P	1999	5	2	1	87	95	45	67	67.3	0.00	0	3	0	0	2	44	2	99		91.96
1276	95		11.04	Central Canal Br	Y	S-261(7)	1968	5	2	1	50	51	2	67	67.0	0.00	0	3	0	0	2	36	2	67		95.47
1504	95		22.39	E Main Canal Br	Y	SU-264(10)	1969	5	2	1	72	76	0	64	64.0	0.00	0	2	0	0	2	36	2	82		95.16
615	95		24.10	16th St SPRR OP	Y	S-264(1)	1951	4	2	3	68	183	12	64	64.0	22.66	2	4	0	0	2	26	2	43		78.43
504	95		33.55	Gila Canal Br	Y	NS-264(57)A	1957	1	4	3	36	110	9	40	40.0	0.00	2	5	0	0	2	39	2	65		80.95
343	95		38.00	Wellton Mohawk Canal Bridge	Y	UNKNOWN	1950	2	4	3	31	94	20	28	28.0	0.00	3	5	0	0	2	24	2	40	F	50.40
2408	95		38.83	Gila River Br	Y	ER-063-1(9)	1993	5	5	16	43	680	45	47	46.4	0.00	2	4	0	0	2	44	2	74		79.00
5006	95		42.50	RCB	Y	S-264(3)	1957	2	19	3	10	32	0	35	39.3	0.00	3	6	1	1	2	36	2	36		84.56
5007	95		46.80	RCB	Y	S-264(3)	1957	2	19	4	10	43	0	35	0.0	0.00	0	6	0	0	2	36	2	36		92.19
583	95		53.28	Castle Dome Wash Br	Y	NS-264(61)A	1961	2	1	6	30	171	45	32	32.1	0.00	3	9	1	1	2	26	2	43		68.22
7109	95		55.92	RCB	Y	U-095-B-504	2003	2	19	4	10	49	30	40	0.0	0.00	0	0	0	0	2	36	2	36		80.00
2963	195		27.13	B Lateral Canal Br	Y	S-SG263(3)	1970	5	1	1	36	38	0	112	112.0	0.00	0	3	1	1	2	36	2	80		98.53
2964	195		27.38	UPRR UP	Y	S-SG263(3)	1968	5	5	4	42	139	9	0	32.0	15.53	0	1			7	72	7	72		



APPENDIX D – YMPO REGION LOCAL GOVERNMENT BRIDGE FACILITIES (PER ADOT BRIDGE INVENTORY)

Agency	Str. No.	Bridge Name	Original Construction Project No.	Year Built	Br. Type		No. of Spans	Max. Span Length Ft.	Struct. Length Ft.	Skw.	Rdwy. Appr. Width Ft.	Br. Rdy Width Ft.	Allow. Vert. Clear.	Ovly. Inch	Bridge Rail Type			Invt. Rtg.	Opr. Rtg.		Suffic. Rtg.	
San Luis	11072	Main Drain Bridge	063-1-(12)P	1999	5	2	1	87	95	45	67	67.3	0	0	3	0	0	2	44	2	99	94.0
Somerton	9270	Toler Lateral Canal	S 56 2	1952	2	1	3	18	53	0	40	28.0	0	1	6	1	1	2	27	2	36	73.9
Wellton	7613	Wellton Canal Br	BRZ-984(47)P	1990	5	5	1	45	48	30	33	33.5	0	2	6	0	0	2	39	2	75	96.8
Wellton	7728	Wellton Canal Bridge	BRZ-984(58)P	1991	5	5	1	38	41	0	41	29.5	0	2	6	0	0	2	38	2	69	94.9
Wellton	7729	Mohawk Canal Bridge	BRZ-984(59)P	1991	5	5	1	69	72	0	41	29.5	0	2	6	0	0	2	39	2	75	94.9
Wellton	8423	Coyote Wash Br	FI 55 (4)	1951	2	1	4	30	112	30	40	40.0	0	2	5	0	0	2	27	2	45	88.8
Yuma City	7518	S Gila Canal Br	BRZ-984(42)P	1991	5	5	1	35	38	36	28	29.5	0	2				2	36	2	36	91.6
Yuma City	7718	S Gila Canal Br	BRZ-984(57)P	1991	5	5	1	30	33	56	28	29.5	0	2				2	36	2	36	100.0
Yuma City	7719	B Canal Bridge	HES-982(144)P	1991	5	5	1	38	41	0	24	45.1	0	2	9	1	1	2	36	2	68	97.9
Yuma City	7721	B Canal Bridge	HES-982(144)P	1991	5	5	1	38	41	0	24	45.1	0	2	9	1	1	2	36	2	70	95.9
Yuma City	8338	S GILA CANAL BR		1967	7	2	1	25	27	15	29	29.1	0	0	6	0	0	2	15	2	15	66.3
Yuma City	8517	B Canal Bridge	EDA 26519	1978	3	3	1	36	39	0	30	40.0	0	3	6	0	0	2	36	2	36	96.9
Yuma City	8533	Old Colorado Riv Br	TEA-YYU-0(23)P	1914	3	10	1	336	444	0	24	17.0	0	0	6	0	0	2	18	1	20	F 55.2
Yuma City	9337	First Street Bridge		1935	2	1	5	26	122	0	64	64.0	0	2	5	0	0	2	36	2	36	95.2
Yuma City	9338	8th Street Bridge		1935	2	1	4	23	84	0	64	60.0	0	2	4	0	0	2	36	2	36	89.1
Yuma City	9489	3rd Street Bridge		1935	2	1	3	21	66	0	40	40.0	0	2	5	0	0	2	36	2	36	78.5
Yuma City	9490	24th Street Bridge		1977	5	2	1	67	68	14	84	80.0	0	0	9	1	1	2	36	2	36	86.9
Yuma City	9491	Magnolia Ave Bridge		1962	2	1	3	29	78	0	40	40.0	0	2	5	0	0	2	36	2	36	94.6
Yuma City	9660	5th Street Bridge	M-837-8 (1)	1978	5	5	1	58	61	15	40	40.0	0	2	9	1	1	2	36	2	36	97.4
Yuma City	9750	A Canal Bridge	BRS-595 (1)P	1981	5	5	1	55	56	22	32	42.0	0	3	6	0	0	2	36	2	36	96.1
Yuma City	9856	East Main Canal Br EB	BRS-263(3)P	1984	5	5	1	71	74	7	63	63.0	0	2	9	1	1	2	36	2	36	95.7
Yuma City	10525	"B" Canal Bridge		1991	5	5	1	38	41	0	24	45.1	0	2	3	1	1	2	36	2	36	100.0
Yuma City	10634	30th Street Bridge		2006	5	5	1	57	61	0	58	66.0	0	3	9	1	1	2	36	2	36	98.0
Yuma City	10686	Avenue 3E SPRR OP	S-491(501)	1976	6	2	6	85	432	14	40	40.0	23.2	0	9	1	1	2	40	2	91	85.1
Yuma City	10924	'A' Canal Bridge		2007	5	5	1	60	64	0	42	93.7	0	3	4	1	1	2	39	2	77	98.9
Yuma City	10925	'A' Canal RCBC		2000	2	19	2	10	21	0	60	0.0	0	0				2	36	2	36	82.3
Yuma City	11104	16th St SPRR OP	S-264(1)	1951	4	2	3	68	183	12	102	102.0	22.66	1	4	0	0	2	26	2	43	64.9
Yuma Co	7516	West Main Canal Br	BRZ-984(41)P	1990	5	5	1	69	72	26	26	45.1	0	2				2	36	2	36	97.9
Yuma Co	7517	Gila Gravity Canal	BRZ-984(40)P	1990	5	5	1	100	104	31	24	29.5	0	2				2	36	2	36	99.9
Yuma Co	7539	B Main Canal Br	BRZ-984(43)P	1991	5	5	1	38	41	0	24	53.2	0	2				2	36	2	36	97.0
Yuma Co	7614	Wellton Canal Bridge	BRZ-984(48)P	1990	5	5	1	30	33	0	29	29.5	0	2				2	36	2	36	99.9
Yuma Co	7615	Mohawk Canal Bridge	BRZ-984(46)P	1990	5	5	1	50	53	11	41	41.5	0	2				2	36	2	36	99.6
Yuma Co	7616	Dome Canal Bridge	BRZ-984(49)P	1990	5	5	1	38	41	0	45	45.1	0	2				2	36	2	36	87.0



Agency	Str. No.	Bridge Name	Original Construction Project No.	Year Built	Br. Type		No. of Spans	Max. Span Length Ft.	Struct. Length Ft.	Skw.	Rdwy. Appr. Width Ft.	Br. Rdy Width Ft.	Allow. Vert. Clear.	Ovly. Inch	Bridge Rail Type			Inv. Rtg.		Opr. Rtg.		Suffic. Rtg.	
Yuma Co	7617	Gila River Bridge		1988	1	5	5	60	303	0	40	33.5	0	2	6			2	36	2	36		91.7
Yuma Co	7618	Mohawk Canal Bridge		1988	1	5	1	30	31	15	28	29.5	0	2	6			2	36	2	36		97.7
Yuma Co	7619	Fortuna Wash Bridge		1988	1	5	4	60	243	20	40	41.1	0	2	9			2	36	2	36		99.8
Yuma Co	7622	Gila River Bridge		1988	1	5	4	60	243	15	40	30.5	0	2	6			2	36	2	36		83.7
Yuma Co	7626	A Canal Bridge	HES-982(142)P	1991	5	5	1	42	45	0	24	53.1	0	2				2	36	2	36		99.9
Yuma Co	7627	A Canal Bridge	HES-982(142)P	1991	5	5	1	35	38	0	24	44.8	0	2				2	36	2	36		97.9
Yuma Co	7637	Mohawk Canal Bridge	BRZ-984(52)P	1991	5	5	1	68	71	16	24	33.6	0	2				2	36	2	36		99.6
Yuma Co	7638	Texas Hill Bridge	BRZ-984(54)P	1991	5	5	1	35	38	27	24	45.1	0	2				2	36	2	36		85.9
Yuma Co	7639	Salinity Canal Br	BRZ-984(53)P	1991	5	5	1	30	33	0	28	29.5	0	2				2	36	2	36		100.0
Yuma Co	7640	Mohawk Canal Bridge	BRZ-984(52)P	1991	5	5	1	56	59	26	24	29.5	0	2				2	36	2	36		100.0
Yuma Co	7717	W Main Canal Br	BRZ-984(56)P	1991	5	5	1	75	78	5	50	60.0	0	2				2	36	2	36		99.2
Yuma Co	7720	A Canal Bridge	HES-982(144)P	1991	5	5	1	30	33	0	24	45.1	0	2				2	36	2	36		99.0
Yuma Co	7730	Mohawk Canal Bridge	BRZ-984(60)P	1991	5	1	1	73	76	0	41	29.5	0	2				2	36	2	36		95.0
Yuma Co	7751	Well-Mhwk Canal Br	BRZ-984(62)P	1991	5	1	1	30	33	0	41	45.1	0	2				2	36	2	36		89.0
Yuma Co	7752	Well-Mohwk Canal Br	BRZ-984(63)P	1991	5	1	1	30	35	0	41	45.1	0	2				2	36	2	36		98.0
Yuma Co	7753	Texas Hill Bridge	BRZ-984(65)P	1991	5	1	1	38	41	0	41	45.1	0	2				2	36	2	36		88.9
Yuma Co	7768	Well-Mohwk Canal Br	BRZ-984(64)P	1991	5	1	1	38	41	0	41	44.8	0	2				2	36	2	36		100.0
Yuma Co	7876	Fortuna Wash Br SFRD	NRH-82-B	1933	3	2	4	36	144	0	40	30.0	0	0	4	0	0	2	72	2	99		79.9
Yuma Co	7902	Gila River Br		1993	1	5	15	40	602	0	34	3.0	0	2	6	1	1	2	36	2	36		83.1
Yuma Co	8342	Wellton-Mohawk Canal		1956	3	3	1	62	62	0	30	24.0	0	3	3			2	36	2	36		82.3
Yuma Co	8368	Central Canal Bridge	NONSYS	1920	7	2	1	31	31	0	26	30.5	0	0	8			2	15	2	15		57.2
Yuma Co	8405	Box Culvert	F 82 10	1949	2	19	3	12	40	0	36	0.0	0	0	0			2	36	2	36		93.2
Yuma Co	8406	Ligurta SPRR UP	FGI-82(10)	1949	4	2	3	38	83	48	0	31.0	14.08	0	5			7	72	7	72		
Yuma Co	8409	Wellton-Mohawk Br		1950	2	4	3	65	142	23	40	40.0	0	1	5			2	15	2	24		70.4
Yuma Co	8410	Ligurta Wash Bridge	FI 26 3	1930	1	4	4	36	146	0	34	34.4	0	0	4			2	41	2	66	S	70.2
Yuma Co	8411	Dry Wash Br	FI 26 3	1930	2	1	4	22	88	0	39	40.3	0	0	4			2	22	2	41		82.9
Yuma Co	8412	Bridge Culvert	FI 26 3	1949	2	19	4	10	74	45	38	0.0	0	0	0			2	36	2	36		95.8
Yuma Co	8413	Bridge Culvert	FI 26 3	1931	2	19	2	10	47	0	40	0.0	0	0	0			2	36	2	36		96.8
Yuma Co	8414	Bridge Culvert	F 26 2	1931	2	19	2	10	46	0	38	0.0	0	0	0			2	36	2	36		95.8
Yuma Co	8415	Bridge Culvert	F 26 2	1931	2	19	4	10	46	0	39	0.0	0	0	0			2	36	2	36		95.8
Yuma Co	8416	Bridge Culvert	F 26 2	1931	2	19	3	10	46	0	41	0.0	0	0	0			2	36	2	36		95.8
Yuma Co	8417	Bridge Culvert	F 26 2	1931	2	19	4	10	60	0	41	0.0	0	0	0			2	36	2	36		95.8
Yuma Co	8418	Bridge Culvert	F 26 2	1931	2	19	2	10	82	0	39	0.0	0	0	0			2	36	2	36		96.8
Yuma Co	8419	Bridge Culvert	F 26 2	1931	2	19	4	10	48	0	40	0.0	0	0	0			2	36	2	36		95.8
Yuma Co	8420	Bridge Culvert	F 26 2	1931	2	19	4	10	47	0	41	0.0	0	0	0			2	36	2	36		95.8



Agency	Str. No.	Bridge Name	Original Construction Project No.	Year Built	Br. Type		No. of Spans	Max. Span Length Ft.	Struct. Length Ft.	Skw.	Rdwy. Appr. Width Ft.	Br. Rdy Width Ft.	Allow. Vert. Clear.	Ovly. Inch	Bridge Rail Type			Inv't. Rtg.	Opr. Rtg.	Suffic. Rtg.			
Yuma Co	8421	Bridge Culvert	F 26 2	1931	2	19	3	10	47	0	40	0.0	0	0	0			2	36	2	36		95.8
Yuma Co	8422	Bridge Culvert	F 26 2	1931	2	19	2	10	66	45	40	0.0	0	0	0			2	36	2	36		93.7
Yuma Co	8424	Wellton SPRR UP	FGI 55 4	1950	4	2	4	89	257	0	34	30.6	0	0	5			2	44	2	67	S	76.2
Yuma Co	8425	Box Culvert	F 55 3	1935	2	19	5	10	46	0	41	0.0	0	0	0			2	36	2	36		94.4
Yuma Co	8426	Box Culvert	F 55 3	1935	2	19	5	10	46	0	39	0.0	0	0	0			2	36	2	36		94.4
Yuma Co	8427	Box Culvert		1941	2	19	4	10	35	0	31	0.0	0	0	0			2	36	2	36		94.4
Yuma Co	8428	Box Culvert		1941	2	19	2	10	35	0	30	0.0	0	0	0			2	36	2	36		93.7
Yuma Co	8429	Box Culvert		1941	2	19	4	10	35	0	29	0.0	0	0	0			2	36	2	36		93.7
Yuma Co	8430	Mohawk Wash CBC		1941	2	19	6	10	35	0	30	0.0	0	0	0			2	36	2	36		92.6
Yuma Co	8431	Owl Wash CBC		1935	2	19	3	10	85	47	40	0.0	0	0	0			2	36	2	36		94.7
Yuma Co	8432	Bridge Culvert		1924	2	19	2	12	116	58	40	0.0	0	0	0			2	36	2	36		94.7
Yuma Co	8515	A Canal Bridge	EDA 26500	1978	3	3	1	36	36	0	30	40.0	0	3				2	36	2	36	S	63.1
Yuma Co	8668	Gila River Bridge		1982	1	5	4	70	730	0	40	30.0	0	2	6			2	36	2	36		92.2
Yuma Co	8795	Lateral A8.9		1984	3	0	1	31	31	0	28	34.0	0	2	6			2	36	2	36		84.0
Yuma Co	8796	Gila River SPP		1982	3	19	8	14	150	0	30	0.0	0	0	0			2	36	2	36		87.9
Yuma Co	8800	A Canal Bridge	BRZ 984(25)P	1986	3	2	1	56	60	35	30	46.0	0	0	9			2	36	2	36		98.8
Yuma Co	8842	West Main Canal Br	BRZ-984(27)P	1986	3	2	1	63	66	0	30	46.0	0	0	9			2	36	2	36		97.0
Yuma Co	8864	Mohawk Canal Bridge	BRZ-984(31)P	1987	3	2	1	50	53	15	30	46.0	0	0	9			2	36	2	36		98.0
Yuma Co	8865	Mohawk Canal Bridge	BRS-328(1)P	1987	3	2	1	65	68	19	30	46.0	0	0	9			2	36	2	36		94.9
Yuma Co	8870	West Main Canal Br	BRZ-984(2)P	1988	1	5	1	42	45	28	28	37.5	0	2	6			2	36	2	36		94.5
Yuma Co	8872	Wellton Canal Bridge	BRZ-984(33)P	1987	1	2	1	68	71	20	32	46.0	0	0	9			2	36	2	36		97.7
Yuma Co	8877	Mohawk Canal Bridge	BRZ-984(29)P	1987	3	2	1	65	68	19	34	46.0	0	0	9			2	36	2	36		98.9
Yuma Co	8913	West Main Canal Br	BRZ-984(34)P	1988	1	5	1	46	49	0	28	37.5	0	2	6			2	36	2	36		97.8
Yuma Co	8941	Dome Canal Bridge	BRZ-934(36)P	1989	1	5	1	35	38	0	28	29.5	0	2	6			2	36	2	36		100.0
Yuma Co	8942	Dome Lateral Bridge	BRZ-984(38)P	1989	1	5	1	30	33	0	28	29.5	0	2	6			2	36	2	36		100.0
Yuma Co	8943	Salinity Canal Br	BRZ-984(37)P	1989	1	5	1	35	38	0	28	29.5	0	2	6			2	36	2	36		100.0
Yuma Co	9271	Main Drain Canal Br	S 56 2	1952	2	1	3	25	73	20	26	26.0	0	0	4			2	27	2	36	S	43.5
Yuma Co	9274	West Main Canal Br	S 56 1	1948	2	1	3	25	68	0	64	64.0	0	0	5			2	36	2	80		93.8
Yuma Co	9275	West Main Canal Br	S 56 3	1960	2	19	2	14	29	45	30	0.0	0	0	0			2	27	2	36		90.9
Yuma Co	9481	Somerton-W Mn Cnl	EDA07-51-26502	1978	3	2	1	60	63	33	28	38.0	0	2	6			2	36	2	36		93.5
Yuma Co	9487	Ave 45E Mohawk Canal		1969	5	4	2	40	80	33	32	32.0	0	0	0			2	36	2	80		84.8
Yuma Co	9631	Mohawk Canal Bridge		1980	3	7	1	31	31	0	28	34.4	0	0				2	36	2	36		99.9
Yuma Co	9751	Gila River Bridge		1982	1	5	4	60	240	0	38	30.0	0	2	9			2	36	2	36		93.8
Yuma Co	9752	Gila River Bridge		1982	1	5	4	60	240	0	38	30.0	0	2	9			2	36	2	36		93.8
Yuma Co	9833	A Canal Bridge	BRS-532(2)P	1986	3	2	1	54	58	34	30	46.0	0	0	9			2	36	2	36		95.7



Agency	Str. No.	Bridge Name	Original Construction Project No.	Year Built	Br. Type		No. of Spans	Max. Span Length Ft.	Struct. Length Ft.	Skw.	Rdwy. Appr. Width Ft.	Br. Rdy Width Ft.	Allow. Vert. Clear.	Ovly. Inch	Bridge Rail Type			Invt. Rtg.	Opr. Rtg.		Suffic. Rtg.		
Yuma Co	9857	2E SPRR OP		1982	5	2	1	94	97	16	66	66.0	23.17	1	9			2	36	2	36		98.5
Yuma Co	9863	South Gila Canal Br	BRS-595(2)P	1986	3	2	1	48	51	23	30	46.0	0	0	9			2	36	2	36		97.4
Yuma Co	9889	Drainage Channel Br	BRS-328(1)P	1986	3	2	1	63	68	0	30	46.0	0	0	9			2	36	2	36		97.9
Yuma Co	9914	West Main Canal Br	BRS-555(1)P	1988	1	5	1	56	60	46	42	41.5	0	2	6			2	36	2	36		94.7
Yuma Co	9950	Timber Bridge		1994	7	2	1	20	21	15	30	32.0	0	0				2	36	2	36		100.0
Yuma Co	10055	Gila Canal Bridge		1997	7	2	1	26	28	0	40	32.4	0	0				2	36	2	36		94.0
Yuma Co	10056	Main Drain Br		1995	1	1	1	23	26	11	30	32.8	0	2	9	1	1	2	36	2	36		97.9
Yuma Co	10057	Main Drain Br		1995	1	1	1	23	26	8	30	32.8	0	2	9	1	1	2	36	2	36		97.9
Yuma Co	10058	Main Drain Br		1995	1	1	1	23	26	0	30	32.8	0	2	9	1	1	2	36	2	36		97.9
Yuma Co	10059	Main Drain Br		1995	1	1	1	23	26	40	30	32.8	0	2	9	1	1	2	36	2	36		97.9
Yuma Co	10060	Main Drain Br		1995	1	1	1	23	26	0	30	32.8	0	2	9	1	1	2	36	2	36		98.9
Yuma Co	10099	Gila River Bridge		1997	5	2	4	68	224	0	40	30.0	0	2	6			2	36	2	36		87.9
Yuma Co	10146	Dome Lateral Bridge	NONSYS	1963	7	2	1	29	32	0	32	32.3	0	0	6			2	10	2	10		61.1
Yuma Co	10423	Main Drain Bridge		2002	1	5	1	22	29	0	30	41.3	0	0				2	36	2	36		99.9
Yuma Co	10430	Fortuna Wash Bridge		2000	5	5	1	73	76	30	128	33.8	0	2	9	1	1	2	36	2	36		94.7
Yuma Co	10548	Wellton Mohawk Channel Br	BR-YYU-0-(032)A	2008	5	1	1	46	50	0	26	34.0	0	4	9	1	1	2	36	2	36		100.0
Yuma Co	10549	Red Top Wash Bridge	YYU-0(031)A	2010	1	5	2	100	200	30	40	40.0	0	0				2	55	2	26		99.6
Yuma Co	10856	Avenue 14E RCB		2003	2	19	6	8	65	10	36	36.0	0	3	5	1	1	2	20	2	20		82.1