Section Six—Circulation Element

6.1 Introduction

This section presents the Circulation Element of the Yuma County Comprehensive Plan. This element supersedes the previous circulation element affecting the unincorporated area of Yuma County. The Circulation Element is defined as a compilation of objectives, policies, actions, maps and programs to guide the future development of the various modes of transportation. Specifically, this element shows the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals and other local public utilities and facilities associated with the Land Use Element of the Comprehensive Plan. An efficient, integrated transportation system is essential to maintain the quality of life and facilitate the economic growth of Yuma County.

Yuma County, to a great extent, is an agricultural region. Other industries that help support the region’s economy are tourism and government. It is noteworthy that the vast majority of jobs are concentrated in incorporated areas like the cities of Yuma, San Luis, Somerton and the Town of Wellton. The Marine Corps Air Station-Yuma (MCAS) and Yuma Proving Ground (YPG) also provide economic stability by employing more than 8,000 people. Another major employer located in the City of Yuma is the Yuma Regional Medical Center, employing over 2,000, thus making the City of Yuma an important transportation point.

Yuma County has also enjoyed an influx of seasonal residents for decades. Visitors from throughout the United States and Canada call Yuma County their second home. Another important inflow is the seasonal agricultural workers. All of these place a transportation demand on Yuma County’s roadway system.

Roadways, railways and airways provide multiple services to the communities and citizens of Yuma County. This manifests the importance of the Circulation Element as it contains summaries of other agencies’ plans and fully detailed maps of Yuma County showing the present condition and future roadway needs.

This element is organized in the following manner: 1) Introduction, 2) Transportation Authority and Current Plans, 3) Presentation of Roadway Network, 4) Non-Motorized Facilities, 5) Presentation of Railway Network, 6) Presentation of Aviation Network, 7) Visual Corridors, 8) Circulation Policies and Priorities, and 9) Circulation Actions. In summary, the Circulation Element provides an overview of existing plans and studies then compares their objectives, policies, goals and programs at both the state and regional levels. It also identifies thoroughfares within the local governmental unit by function. Key issues and concerns originating from public participation are then addressed. Attention is then given to future transportation projects and visual corridors.

The Gila Mountains, photo credit to http://www.travelpod.com/travel-blog-entries
Transportation in Context

The vehicular transportation system in Yuma County is comprised of 1431.24 lane miles of paved and 1500 of unpaved roads that are maintained by Yuma County and the Arizona Department of Transportation (ADOT) as shown in Table 1 below. Railways are also an important component of the transportation system with 199.57 track miles. This includes main tracks, yard tracks, inactive mainline tracks for future use and inactive yard tracks. As for aviation, Yuma County is the home to the Yuma International Airport which is a shared-use airport with Marine Corps Air Station-Yuma.

<table>
<thead>
<tr>
<th>Table 1: Yuma County Transportation Context</th>
<th>LANE MILES 2000-2010</th>
<th>LANE MILES 2010-2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona Department of Transportation (ADOT)</td>
<td>807</td>
<td>853(^{(1)})</td>
</tr>
<tr>
<td>Yuma County (paved)</td>
<td>500</td>
<td>578.24(^{(2)})</td>
</tr>
<tr>
<td>Yuma County (Unpaved)</td>
<td>1500</td>
<td>1500(^{(2)})</td>
</tr>
<tr>
<td>Averaged Paved Road Life</td>
<td></td>
<td>30 years</td>
</tr>
<tr>
<td>Averaged Household Vehicle Trips Per Day</td>
<td></td>
<td>10 trips</td>
</tr>
<tr>
<td>Average Vehicle Trip Length</td>
<td></td>
<td>8.7 miles</td>
</tr>
</tbody>
</table>

(1) Information obtained from ADOT

Interstate 8 looking southeast., photo credits to [http://www.aaroads.com](http://www.aaroads.com)
6.2 Transportation Authority

Yuma County is a main partner in the Yuma Metropolitan Planning Organization (YMPO), which represents all incorporated jurisdictions within Yuma County for the purpose of planning the expenditure of federal and state transportation funds. The primary goal of YMPO, as stated in the 2011-2033 Regional Transportation Plan, is to “provide the continual development of a complete, dependable, efficient, safe, aesthetic and economical transportation system, bearing in mind that our quality of life is paramount and that transportation needs must recognize the specific demands of government and businesses, including those of urban areas, rural and agricultural interests and military operations.”

The County has no legal obligation to incorporate plans developed and adopted by the YMPO Executive Committee into the Yuma County 2020 Comprehensive Plan. Further, YMPO is advisory to the County with regard to road construction and planning. This responsibility, in combination with the vested countywide authority and representation, makes the County a proponent of YMPO and its plans.

Existing Plans

2011—2015 Five-Year Transportation Facilities Construction Program:

Prepared by: ADOT, 2010

Scope: The Arizona Department of Transportation (ADOT) is mandated by state law to be responsible for constructing and maintaining all interstate and state highways in Arizona and providing financial assistance to public airports for airport development projects. Fulfilling this responsibility includes extensive public participation and sophisticated technical evaluation known as the Priority Programming Process. The process culminates in the Five-Year Transportation Facilities Construction Program for highways and airports. This publication identifies programs and projects programmed for State fiscal years 2011 through 2015 (see Table 4).

Elements: Financial Summary of All Programs, Summary of Dollars by County and Summary by Resources, Highways Programs, Highways Subprograms, Summary of Dollars by Freeways, MAG Area, Regional Transportation Plan Freeway Program, System wide.

2010—2033 Regional Transportation Plan (RTP):


Scope: The 2010-2033 Regional Transportation Plan is a multi-modal plan with the premise that it serves people efficiently, affordably and safely. In addition to the traditional roadway improvements, this plan identifies investments in public transportation, bicycling and walking to promote health, environmental quality and mobility for those who do not have access to cars or those who choose to use other modes.
Existing Plans (Continued)

Elements: Travel and Socio-Economic Characteristics, Public Participation, Roadway, Transit, Non-Motorized Transportation, Safety, Airport, Rail/Port/International Border.

2009 Yuma International Airport Master Plan Update:

Prepared by: Ricondo & Associates, Inc. in Association with Geodetix and Nicklaus Engineering.

Scope: The 2009 Yuma International Airport Master Plan Update describes the analyses and assessments conducted during the preparation of the Airport Master Plan and provides the results of those efforts. It includes discussion of the previous Master Plan Update, a brief history of the Airport and a general discussion of the goals underlying the current Airport Master Plan. The chapters of this report provide an inventory of Airport facilities, document the aviation demand forecasts, discuss the demand/capacity analyses and facility requirements, presents the alternatives considered and the resulting Airport Development Plan (ADP), defines an implementation plan and financing plan for the recommended ADP and presents an overview of potential environmental effects associated with the recommended ADP.

Elements: Airport Inventory, Aviation Demand Forecast, Demand/Capacity Analyses and Facility Requirements, Alternatives and Airport Development Plan, Financial Plan and Environmental Overview.

FY2012—FY2016 Capital Improvement Plan:

Prepared: Department of Development Services Budget Review Team

Scope: The Yuma County Capital Improvement Plan (CIP) is a five-year schedule of public physical improvements to the county’s infrastructure. The CIP sets forth proposed expenditures for systematically constructing, upgrading, expanding, remodeling and replacing of “public improvements” within the foreseeable five-year future. The CIP will establish a schedule for each project identified according to its priority and funding resources available. Because the CIP identifies where County facility improvements will be done, where County facilities will be expanded and where County dollars will be spent, it is more than a schedule of expenditures. It is a statement of budgetary policy and a planning document.

Sections: Highway Projects, Public Facilities, Storm water Control, Housing Projects, Law Enforcement, General Government (Information Technology Services) and Community Development Projects.

(1) The Airport Development Plan is form by the preferred development options and alternatives presented in chapter 5.6 of the Yuma International Airport Master Plan Update.
6.3 Roadway Network

Thoroughfares are the community’s mobility life line. Not only do they allow people to commute to the places where they live, work, recreate, shop and worship, but they also link them to other communities. They allow services to reach their destinations and allow for the movement of goods to places of distribution. From 2000 to 2010, Yuma County’s population has grown 22.32%. Consequently, Yuma County must plan for new rural roads and the expansion and improvement of existing roads that connect to major traffic generators and facilitate the movement of people and goods in a safe and effective manner.

In the 2010 Comprehensive Plan, Yuma County residents indicated that traffic was the number one quality of life issue. According to the Plan, transportation was and is one of the most critical factors affecting the day-to-day lives of county residents. This statement was supported by information obtained from selected traffic volume data collection sites throughout the county illustrating the increased volume on existing roadway systems from 1991 through 2009 (Table 2). Since then new vehicle traffic counts have been conducted in the same locations as they where held in 2000. At some points the trend was the same, while in others traffic was reduced. This is the result of enhancements to the road network and public transportation implementation.

<table>
<thead>
<tr>
<th>Location</th>
<th>1991</th>
<th>2000</th>
<th>2009</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avenue 64E North of I-8 (Dateland)</td>
<td>420</td>
<td>550</td>
<td>512</td>
<td>-7%</td>
</tr>
<tr>
<td>Avenue 29E North of I-8 (Town of Wellton)</td>
<td>1,210</td>
<td>1,863</td>
<td>2,765</td>
<td>48%</td>
</tr>
<tr>
<td>Fortuna Road South of Frontage Rd (Foothills)</td>
<td>6,950</td>
<td>11,903</td>
<td>12,570</td>
<td>5.6%</td>
</tr>
<tr>
<td>County 19th Street East of U.S. Hwy. 95 (Gadsden)</td>
<td>2,650</td>
<td>7,533</td>
<td>5,399</td>
<td>-28%</td>
</tr>
</tbody>
</table>

Table 2: Percent Change in Selected Yuma County Traffic Counts

Table 2: Percent changed in selected Yuma County traffic counts.

The need to satisfy the increasing vehicular traffic during the planning period of 2010-2020 is present. The capacity and level of service of the existing road network is and must be constantly evaluated and improved. The promotion of transportation alternatives and adaptation to existing ones should be encouraged.

The Citizen Advisory Groups (CAGs) made recommendations on transportation improvement projects for their respective planning areas. The recommendations include maintenance of existing roads, improving roads to a reliable all weather standard, the periodic grading of primitive roads employing dust control measures, increasing safety at roads with proper signage, improving the lighting on busy corners, strengthening the rural transportation system, constructing new roads to current Yuma County roadway standards and resolving road flooding.

(1) Yuma Metropolitan Planning Organization
Yuma County’s roadway system has to provide support for various transportation modes and at the same time satisfy land use needs. Yuma County maintains approximately 2,078 lane miles of roadways within its unincorporated area. These roads provide access to parcels and serve as major thoroughfares between urban areas and other counties.

The linkage between the internal transportation network (county and cities) and the external transportation network (state and federal) has to be efficient and effective. In order for the Circulation Element to be consistent with regional and local general plans the implementation of goals, objectives and policies needs to be adopted. This element incorporates recommendations from the YMPO 2010-2033 Regional Transportation Plan.

Level of service (LOS) is a standard measure of traffic service along a roadway or intersection that determines the effectiveness of the elements of the transportation infrastructure. It categorizes traffic flow with corresponding safe driving conditions. This concept also applies to transit. LOS standards use letters from A through F (Table 3) with A being the best and F being the worst.

<table>
<thead>
<tr>
<th>LOS</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Free Flow; virtually no delay</td>
</tr>
<tr>
<td>B</td>
<td>In the range of stable flow, but the presence of other users in the traffic stream begins to be noticeable.</td>
</tr>
<tr>
<td>C</td>
<td>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.</td>
</tr>
<tr>
<td>D</td>
<td>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.</td>
</tr>
<tr>
<td>E</td>
<td>Represents operating conditions at or near the capacity level. All speeds are reduced to a low but relatively uniform value.</td>
</tr>
<tr>
<td>F</td>
<td>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.</td>
</tr>
</tbody>
</table>

Table 3: Level of Service

Yuma County will strive to maintain a LOS of D or better on all roadways. When measuring LOS, Yuma county shall use the criteria established by the Highway Capacity Manual(1).

(1) Highway Capacity Manual is published and updated by the United States’ Transportation Research Board
Robert A. Vaughn Expressway/SR195 Level of Service

The Robert A. Vaughn Expressway/State Route 195 was opened to traffic September 4, 2009. The Arizona Department of Transportation (ADOT), in conjunction with the Federal Highway Administration (FHWA) and the Yuma Metropolitan Planning Organization (YMPO) identified the need to provide a direct transportation route between the then future commercial international Port of Entry (POE) near San Luis, Arizona and Interstate 8 (I-8). YMPO anticipated by 2015 that more than 1,500 commercial vehicles per day (vpd) would be using the existing POE. In addition, YMPO expects that the total vehicular traffic (passenger cars and commercial vehicles) at the existing POE may be as much as 50,000 vpd in 2015.

ADOT uses a threshold of 10,800 vpd for level of service (LOS) C on a two-lane rural-highway. According to ADOT and American Association of State Highway and Transportation Officials’ (AADHTO) guidelines, traffic volumes in excess of 10,000 vpd warrant consideration of four or more traffic lanes to provide acceptable operation and maintenance at a LOS C. Based on the projected traffic volumes, a four-lane cross section is warranted for the entire extent of SR195 to maintain a Level of Service C\(^{(1)}\).

Roadway Network Projects

The Circulation Element continues to build on the previous plans prepared by the YMPO. Several projects have been implemented since the completion of the 2001-2023 RTP. These projects addressed the continued growth of the area. The notable ones include:

- SR195 from Avenue E to 32nd Street
- 24th Street widening from Avenue 6E to Avenue 9E
- Avenue E widening San Luis POE II to SR195

Despite the current economic conditions, population and employment growth will continue, and it is important that improvements to the roadway system accommodate that growth at an acceptable level of service. Any existing or projected volume to capacity ratio that exceeds 0.85 indicates a capacity deficiency that was evaluated to identify potential improvements. An unacceptable level of service can be addressed in different ways including widening the subject street, widening a parallel street or constructing a new parallel street. Additionally, roadway segments that promote grid continuity and provide the backbone network in developing areas should be considered. All these factors were examined in developing the roadway element for the 2010-2033 RTP.

The need for transportation improvements in the roadway network needs to be supported from analysis of traffic volumes and levels of service based upon the levels of growth. This analysis needs to be based on the latest population, housing and employment values.

The different roadway projects are presented in the Roadway Network Project table shown in the next page, which is a compiled list extracted from YMPO’s roadway element projects. YMPO’s project list is presented in five-year periods from a revenue standpoint. Only the first five year period is typically described as programmed and the anticipated revenues are more reliable. Beyond the first five years the revenue is less predictable and priorities can change\(^{(1)}\). See Map 1.

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\(^{(1)}\) 2033 Regional Transportation Plan
## Circulation Element

### Table 4: Roadway Network Projects

<table>
<thead>
<tr>
<th>Project</th>
<th>Location</th>
<th>Description</th>
<th>Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Highway 95 Widening</td>
<td>Avenue 9E to Aberdeen Road</td>
<td>Reconstruct Fortuna Wash Bridge and Fortuna Road intersection, widen roadway from two lanes to four lanes</td>
<td>ADOT</td>
</tr>
<tr>
<td>Interstate 8 Pavement Preservation</td>
<td>California State line to Fortuna Road</td>
<td>Pavement preservation project</td>
<td>ADOT</td>
</tr>
<tr>
<td>12&lt;sup&gt;th&lt;/sup&gt; Street-Phase 1</td>
<td>Avenue A to Avenue B</td>
<td>Making 12&lt;sup&gt;th&lt;/sup&gt; Street full connect between Avenue A and Avenue B by bridging the East Main Canal and constructing a new two lane road between 21&lt;sup&gt;st&lt;/sup&gt; Drive and 14&lt;sup&gt;th&lt;/sup&gt; Avenue</td>
<td>City of Yuma</td>
</tr>
<tr>
<td>16&lt;sup&gt;th&lt;/sup&gt; Street Widening</td>
<td>45&lt;sup&gt;th&lt;/sup&gt; Avenue to Avenue D</td>
<td>Reconstruction and expansion of road to four lanes</td>
<td>City of Yuma</td>
</tr>
<tr>
<td>16&lt;sup&gt;th&lt;/sup&gt; Street Widening</td>
<td>6&lt;sup&gt;th&lt;/sup&gt; Avenue to Arizona Avenue</td>
<td>Widen 16&lt;sup&gt;th&lt;/sup&gt; Street to a 7 lane cross-section, realign 7&lt;sup&gt;th&lt;/sup&gt; Avenue and 8&lt;sup&gt;th&lt;/sup&gt; Avenue to form a single intersection, provides for restricted access from minor side streets</td>
<td>City of Yuma</td>
</tr>
<tr>
<td>1&lt;sup&gt;st&lt;/sup&gt; Avenue Reconstruction</td>
<td>12&lt;sup&gt;th&lt;/sup&gt; to 16&lt;sup&gt;th&lt;/sup&gt; Street</td>
<td>Reconstruct 1&lt;sup&gt;st&lt;/sup&gt; Avenue from 12&lt;sup&gt;th&lt;/sup&gt; to 16&lt;sup&gt;th&lt;/sup&gt; Street</td>
<td>City of Yuma</td>
</tr>
<tr>
<td>1&lt;sup&gt;st&lt;/sup&gt; Street Reconstruction</td>
<td>Avenue B to Figueroa Street</td>
<td>Reconstruct with curb, gutter, sidewalk, landscaped median, storm drainage and streetlights</td>
<td>City of Yuma</td>
</tr>
<tr>
<td>24&lt;sup&gt;th&lt;/sup&gt; Street Widening</td>
<td>Avenue B to Avenue C</td>
<td>Reconstruction and widening to four lanes</td>
<td>City of Yuma</td>
</tr>
<tr>
<td>24&lt;sup&gt;th&lt;/sup&gt; Street Widening</td>
<td>Avenue C to Avenue D</td>
<td>Reconstruction and widening to six lanes</td>
<td>City of Yuma</td>
</tr>
<tr>
<td>32&lt;sup&gt;nd&lt;/sup&gt; Street Reconstruction</td>
<td>Avenue B to Avenue C</td>
<td>Reconstruction to current City of Yuma standards</td>
<td>City of Yuma</td>
</tr>
<tr>
<td>32&lt;sup&gt;nd&lt;/sup&gt; Street</td>
<td>Pacific Avenue &amp; 32&lt;sup&gt;nd&lt;/sup&gt; Street</td>
<td>Add second dedicated eastbound left turn lane and convert existing left-turn lane to a through lane</td>
<td>City of Yuma</td>
</tr>
<tr>
<td>32&lt;sup&gt;nd&lt;/sup&gt; Street Mill &amp; Replace</td>
<td>Catalina Drive to Avenue 3E</td>
<td>Mill ¾&quot; of existing asphalt pavement and replace</td>
<td>City of Yuma</td>
</tr>
<tr>
<td>32&lt;sup&gt;nd&lt;/sup&gt; Street Expressway</td>
<td>Avenue 3E to Avenue 5E</td>
<td>Widen existing street to six lanes</td>
<td>City of Yuma</td>
</tr>
<tr>
<td>32&lt;sup&gt;nd&lt;/sup&gt; Street Widening</td>
<td>Avenue C to Avenue D</td>
<td>Reconstruction and widening to six lanes</td>
<td>City of Yuma</td>
</tr>
<tr>
<td>4&lt;sup&gt;th&lt;/sup&gt; Avenue Mill &amp; Replace</td>
<td>Catalina Drive to 4&lt;sup&gt;th&lt;/sup&gt; Street</td>
<td>Mill 4&quot; of existing asphalt pavement and replace</td>
<td>City of Yuma</td>
</tr>
<tr>
<td>8&lt;sup&gt;th&lt;/sup&gt; Avenue Widening</td>
<td>24&lt;sup&gt;th&lt;/sup&gt; Street to 32&lt;sup&gt;nd&lt;/sup&gt; Street</td>
<td>Reconstruction and expansion of road to four lanes, improvements to intersection geometry at Catalina Drive and signalization of Catalina Drive</td>
<td>City of Yuma</td>
</tr>
<tr>
<td>Arizona Avenue Reconstruction</td>
<td>32&lt;sup&gt;nd&lt;/sup&gt; Street to 40&lt;sup&gt;th&lt;/sup&gt; Street</td>
<td>Reconstruction to current City of Yuma standards</td>
<td>City of Yuma</td>
</tr>
<tr>
<td>Avenue 10E</td>
<td>32&lt;sup&gt;nd&lt;/sup&gt; Street to 40&lt;sup&gt;th&lt;/sup&gt; Street</td>
<td>Widening of existing portion of road to four lanes and construction of uncompleted segment</td>
<td>City of Yuma</td>
</tr>
<tr>
<td>Project</td>
<td>Location</td>
<td>Description</td>
<td>Agency</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>---------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>Avenue 3½E</td>
<td>Avenue 3E &amp; 24th Street to 40th Street</td>
<td>Construct a six lane road along the B Canal connecting Avenue 3E to Avenue 3½E, the widening Avenue 3½E to six lanes south to 40th Street</td>
<td>City of Yuma</td>
</tr>
<tr>
<td>Avenue 5½E Widening and Extension</td>
<td>32nd Street to 40th Street</td>
<td>Widening of existing portion of road to four lanes and construction of uncompleted segment</td>
<td>City of Yuma</td>
</tr>
<tr>
<td>Avenue 6E Widening</td>
<td>32nd Street to 40th Street</td>
<td>Widen existing street to five lanes</td>
<td>City of Yuma</td>
</tr>
<tr>
<td>Avenue 8½E Widening and Extension</td>
<td>32nd Street to 48th Street</td>
<td>Widening of existing road to four lanes and construction of uncompleted segments between 40th Street and 48th Street</td>
<td>City of Yuma</td>
</tr>
<tr>
<td>Avenue C Widening</td>
<td>24th Street to 32nd Street</td>
<td>Reconstruction and widening to four lanes</td>
<td>City of Yuma</td>
</tr>
<tr>
<td>Avenue C Widening</td>
<td>32nd Street to 40th Street</td>
<td>Reconstruction and widening to four lanes</td>
<td>City of Yuma</td>
</tr>
<tr>
<td>Giss Parkway Widening</td>
<td>4th Avenue to Interstate 8</td>
<td>Reconstruction and widening to four lanes</td>
<td>City of Yuma</td>
</tr>
<tr>
<td>Giss Parkway Extension</td>
<td>Interstate 8 to Pacific Avenue</td>
<td>Full construction of Giss Parkway, four lanes from Interstate 8 to Pacific Avenue</td>
<td>City of Yuma</td>
</tr>
<tr>
<td>Avenue 7E Reconstruction and Extension</td>
<td>16th Street to 24th Street</td>
<td>Reconstruction of an existing portion of road to City of Yuma Standards, construction of uncompleted segments between 16th Street and 24th Street and construct a new crossing of the South Gila Valley Canal</td>
<td>City of Yuma/ Yuma County</td>
</tr>
<tr>
<td>Frontage Roads</td>
<td>Avenue 9E to Foothills Boulevard</td>
<td>Reconstruction to 2-lane road with a continuous left hand turn lane, curb and a 7 foot sidewalk on one side only, along with intersection improvements</td>
<td>City of Yuma/ Yuma County</td>
</tr>
<tr>
<td>Avenue C Reconstruction</td>
<td>8th Street to 1st Street</td>
<td>This roadway section consists of a 54 foot wide curb to curb traveled way with curb, gutter and sidewalks. There will be a central 14 foot left-turn lane with one 12 foot travel lane and one 8 foot shoulder on each side.</td>
<td>Yuma County</td>
</tr>
<tr>
<td>County 8th Street Widening</td>
<td>Avenue C to Avenue D</td>
<td>Reconstruct the existing 2-lane roadway section to an urban five lane section with curbs, sidewalks and related drainage improvements</td>
<td>Yuma County</td>
</tr>
<tr>
<td>County 12th Street Widening</td>
<td>Scottsdale Road and Foothills Boulevard</td>
<td>Staged widening of County 12th Street (City 40th Street) to a five lane urban roadway between Avenue 12E to Foothills Boulevard and three lanes between Scottsdale Avenue to Avenue 12E</td>
<td>Yuma County</td>
</tr>
<tr>
<td>County 8th Street Extension</td>
<td>Avenue 36E to Avenue 37E</td>
<td>Extend the existing roadway around Antelope Hill between Avenue 37E to Mohawk Valley roadway (Avenue 36E Extension)</td>
<td>Yuma County</td>
</tr>
<tr>
<td>Bridge Replacement</td>
<td>County 19th Street at the Main Drain</td>
<td>Bridge Replacement</td>
<td>Yuma County</td>
</tr>
</tbody>
</table>
## Circulation Element

<table>
<thead>
<tr>
<th>Project</th>
<th>Location</th>
<th>Description</th>
<th>Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intersection Improvement</td>
<td>Foothills Boulevard and 48th Street</td>
<td>Traffic signals may be considered at this intersection, improvements to retain the storm water on the existing Foothills Boulevard are recommended to retain the water in the parkway areas.</td>
<td>Yuma County</td>
</tr>
<tr>
<td>Intersection Improvement</td>
<td>County 15th &amp; Avenue C</td>
<td>Avenue C south of County 14th Street curves and becomes County 15th Street. A reduced speed limit is posted through this section. The roadway curve will be redesigned and rebuilt for a uniform speed limit.</td>
<td>Yuma County</td>
</tr>
<tr>
<td>Avenue E Widening</td>
<td>Mexican Border to S.R. 195</td>
<td>Widen existing two lane road to four lanes</td>
<td>City of San Luis</td>
</tr>
<tr>
<td>County 22nd Street</td>
<td>9th Avenue to 10th Avenue</td>
<td>Construct a new two lane road</td>
<td>City of San Luis</td>
</tr>
<tr>
<td>County 24th Street</td>
<td>10th Avenue to Avenue F</td>
<td>Construct a new two lane road</td>
<td>City of San Luis</td>
</tr>
<tr>
<td>Intersection Improvement</td>
<td>Avenue B and County 15th Street</td>
<td>Intersection Improvements</td>
<td>City of Somerton</td>
</tr>
<tr>
<td>Somerton Avenue Widening</td>
<td>Fern Street to County 17th Street</td>
<td>Widen to four lanes</td>
<td>City of Somerton</td>
</tr>
<tr>
<td>Somerton Avenue Widening</td>
<td>Jefferson Street to County 15th Street</td>
<td>Widen to four lanes</td>
<td>City of Somerton</td>
</tr>
</tbody>
</table>
Functional Classifications

Functional classification defines the hierarchy of streets in a roadway system. The federal functional classification of roadways in Yuma County is shown below. These classifications are standardized nationwide by the Federal Highway Administration (FHA). In general, the interstate and arterials provide a high level of mobility for the traveling public with minimal allowance for access, while the collectors and local streets provide for residential and non-residential access. Individual roads and streets do not serve travel independently in any major way. Rather, most travel involves movement through a network of roads. It becomes necessary then to determine how this travel can be channelized within the network in a logical and efficient manner. Functional classification defines the nature of this channelization process by defining the part that any particular road or street should play in serving the flow of trips through a highway network. Understanding the functionality of the road network is helpful when considering the location of future growth. Adequate access to the rest of the community should be a key consideration in the planning process for future growth. See map 2 and map 3.

Federal Functional Classifications

- **Urban Principal Arterial** - Routes which carry through traffic and most of the trips entering/leaving a Federally-designated Urban Area. They provide continuity for all rural arterials that intercept the urban boundary.

- **Rural Principal Arterial** - Corridor movement suitable for substantial statewide or interstate travel between larger population centers.

- **Urban Minor Arterial** - Within a Federally designated Urban Area these roads interconnect with and augment the urban principal arterial system. They distribute travel to geographic areas smaller than those of higher systems.

- **Rural Minor Arterial** - Link cities, large towns and other traffic generators that are capable of attracting travel over long distances. Integrates interstate and inter-county service. Have spacing consistent with population density so all developed areas are within a reasonable distance from the arterial system.

- **Urban Collectors** - Provide both land access and traffic circulation within urban residential neighborhoods and commercial and industrial areas in Federally designated Urban Areas. Route density is much higher than in rural areas.

- **Rural Major Collector** - Link nearby larger towns or cities, or with routes of higher classifications (serves more important intra-county travel corridors which could connect consolidated schools, shipping points, important agricultural areas, etc.).

- **Rural Minor Collector** - Spaced consistent with population density to accommodate local roads within reasonable distance of collector roads. Provides service to smaller communities. Links locally important traffic generators with the arterial system.
Map 3: Roadway Network Map—Northeast Area
6.4 Non-Motorized Facilities

It is becoming increasingly important that an area’s transportation system accommodate all modes of travel. The City of Yuma continues to incorporate bicycle facilities into the design of the street system as well as constructing separate bicycle paths. The purpose and need for additional paths has been identified by public input and existing plans, and will be incorporated into the 2033 RTP. The existing bicycle facilities are shown in Figure II-7 of the RTP. As can be seen, there are significant gaps in the existing system.

Non-Motorized Transportation

Non-motorized transportation can reduce congestion and increase the livability of the region. Non-motorized forms of transportation improve the environment and personal health, enhance the quality of life, and increase economic vitality. Increasingly, bicycling and walking are considered indicators of a region’s livability which can impact attracting business and workers as well as tourism. Additionally, areas that are bicycle and pedestrian “friendly” provide transportation choices for all citizens.

Location of Bike Routes

Two bicycle routes have been proposed in unincorporated Yuma County.

- The Foothills Boulevard Loop is located on the south side of Interstate 8 starting at Foothills Boulevard/South Frontage Road and continues east to Avenue 15E, then south to County 14th Street, then west to Foothills Boulevard, then north to South Frontage Road. (See Map 4 and Map 5).

- The other route is located on the north side of Interstate 8 and extends west from Foothills Boulevard to the Bike Lane that ends at Avenue 9E and the Bike Path that ends at approximately Avenue 8½ E identified in the City of Yuma Bikeways Map (See Map 4 and Map 5).

(1) 2010-2033 Regional Transportation Plan
Map 4: Foothills Bicycle Routes

*Note: Extension of the proposed routes into the City of Yuma are for information only and will be coordinated with the City of Yuma.*
Map 5: Foothills Bicycle Routes
Public Transit History

Since 1999, the Yuma County Area Transit (YCAT) system has grown from a transit service offering only paratransit service to the current mix of demand-responsive and fixed-route service. Paratransit is a term used to define transit service that operates in response to calls from passengers or their agents to the transit operator, who then dispatches a vehicle to pick up the passengers and transport them to their destination. It does not operate over a fixed route or a fixed schedule. Yuma County’s paratransit is known as Dial-a-Ride.

Before 1999, only private transportation companies operated transit service in Yuma County, with taxis serving the urbanized areas and private van services providing transportation between San Luis and Yuma. The Saguaro Foundation began operating Dial-a-Ride funded by YMPO in February 1999. YCAT’s fixed-route service began in 2000 with service between San Luis and Yuma. YCAT service between Yuma and Foothills was initiated in 2001, but the ridership was not considered high enough to justify the cost, and the system was shortened to terminate at Arizona Western College.

After financial and operating difficulties in 2003 nearly caused the fixed-route transit to shut down, the City of Yuma and a consortium of local groups contributed additional funding to the system. The YMPO selected a new operating contractor and the service began to grow, and an additional route to Wellton initiated service in January 2006. Both demand-response and fixed-route service is administered and funded by the YMPO. YMPO also owns all the vehicles for the fixed-route and demand-response service and leases the 14th Street and Atlantic Avenue maintenance facility.

Yuma County Intergovernmental Public Transportation Authority

YCIPTA is an Intergovernmental Public Transportation Authority (IPTA) that was formed on December 13, 2010 by the Yuma County Board of Supervisors under Resolution No. 10-52 to administer, plan, operate and maintain public transit services throughout Yuma County, including within the political jurisdictional boundaries of the cities of Yuma, San Luis, Somerton, the town of Wellton and the unincorporated Yuma County areas. Northern Arizona University is also a member of the IPTA. Recent legislation will allow the Arizona Western College (AWC) and the local tribal governments to join the authority.

Current Studies

Yuma County is the sponsor of a Transit Needs Study funded by ADOT that will be completed by December 2011. The study will review existing conditions and project future growth and economic conditions to make final recommendations for future transit services based on various levels of funding. In order to determine the best type of transit system available to county residents, a key component of the study is the review and development of service alternatives based on established transit goals and objectives. In addition, the study consultants will conduct a peer-city review to determine how transit services other communities with characteristics similar to those of the Yuma region. Funding will be a continued source of discussion related to transit, and the study results will identify funding sources and amounts.
6.5 Railway Network

The Union Pacific Railroad’s (UPRR) Sunset Route was originally constructed between 1877-1887. The Sunset Route crosses Yuma County on its run from the Port of Los Angeles, California to El Paso, Texas and points beyond.

In 1926, work was completed on a rail link called the Wellton Branch between the Sunset Route at Wellton and Phoenix, Arizona in order to provide a direct link between Phoenix and points to the west. The Sunset Route main line passes to the south of Phoenix. In 1996, this track was closed between Roll in Yuma County and Arlington in Maricopa County because of low traffic volumes and high maintenance costs. Though out of service, these tracks remain in place and have not been officially abandoned by Union Pacific and are currently classified as inactive.

The Yuma Valley Railroad (YVR) line was originally built in 1914 by the U.S. Bureau of Reclamation along the newly built Colorado River Levee to help maintain and allow for emergency repair of the levee during times of high water. It was operated for nearly 20 years until flood control projects farther up river removed the need for this line for flood control purposes. In 1983 the Interstate Commerce Commission (ICC) approved the abandonment of the portion of the line south of the Yuma Desalting Plant. Prior to 2005, a three car tourist train pulled by a vintage diesel engine operated on the 6.1 mile route between downtown Yuma and the Yuma Desalting Plant. In 2005 the Bureau of Reclamation declared the tracks inadequately maintained for passenger traffic. Furthermore, the U.S. Department of Homeland Security and the Arizona National Guard had begun to utilize the YVR right of way for border patrol and military operations, blocking the tracks south of the Yuma Desalting Plant. The track and rails remain in place as of 2011.

The McElhaney Cattle Company located near Roll, Arizona operates one of the ten largest cattle feed facilities in the United States. The Union Pacific Railroad has granted McElhaney railroad right-of-way over six miles of the Wellton Branch from Wellton to McElhaney’s cattle feed facility located northeast of Wellton. Built in the 1950s, it houses over 130,000 head of cattle which consume over 11,000 carloads of grain per year. McElhaney Cattle Company operates one locomotive for switching to their grain silos. 100 car grain trains arrive and deliver twice a week, with McElhaney crews assuming operation responsibilities from Union Pacific crews at Wellton. See map 4.

Union Pacific. Photo credit: Yuma County, DDS, Community Planning
Union Pacific’s Double Tracking Project

In 2007, there were approximately 49 trains per day on Yuma County’s stretch of track, carrying a total annual load of about 168,000 carloads of freight. Certain portions of the Sunset Route have been double tracked while preparations for double tracking of the remaining sections has been completed. Currently, the double tracking project from Los Angeles, California to El Paso, Texas is 64% completed, but the section located in Yuma County will not be a priority over the next 10 to 20 years, as the single railroad track is sufficient to manage the actual train traffic. The Wellton section is double tracked. The doubling of the tracks in the remaining portions of Yuma County will be triggered by increased shipping and hauling demand as the national economy improves. Another important factor that will influence the reactivation of the doubling of the tracks is the potential rise of diesel fuel prices which will make shipping by rail more competitive than by semi-tractor trailer by road.

The last part of the track doubling project could be the crossing of the Colorado River. Union Pacific sees the permitting process as a five year task since it involves the crossing of waterways. A major public sector entity involved in this process would be the Army Corps of Engineers. The construction of a new bridge from UP’s perspective also looks remote and involves several entities. Depending on the project’s location, this could potentially involve tribal lands, the City of Yuma, Yuma County, Army Corps of Engineers and any agency related to historical landmarks. Yuma County residents will play an important key role in the decision for the location of a second bridge for the crossing of a second track.

Short Line from Mexico Project

In 2009, the plan to turn the bay of Punta Colonet in Baja California, Mexico into a deep water mega-container port was announced. The intent is for a port able to handle the next generation vessel and port operations from Asia due to the congestion at the ports of Los Angeles, Long Beach and Oakland. This demand also brought the need to plan for the movement of goods via roadways and tracks into the United States. One of the potential locations to connect into the United States’ rail network considered was Yuma County.

The potential construction of a short line in Yuma County could represent a big impact in the community and development depending on its final location. However, Union Pacific has abandoned plans to participate in the construction of the short line coming from Mexico for the proposed port. The reasons mainly have to do with economics and logistics. The project has been placed on hold due to a reduction of the demand and movement of containers between Asia and the United States.

Another important factor according to Union Pacific is the expansion of the Panama Canal (the third set of Locks Project) which is a project proposed by the Panama Canal Authority (PCA) that will double the capacity of the Canal by 2014 allowing larger ships to transit and making the movement of goods coming from the west cheaper. Although the UPRR’s decision of not to participate in the project means Yuma County will no longer be considered for the project because Union Pacific owns all existing rail lines in the area and does not allow another railroad to use their tracks, the reactivation of the project through a Metropolitan Planning Organization (MPO), municipality or the construction of a short line railway by a private company should not be discarded.
**Rail Freight and Passenger**

The Union Pacific Railroad (UPRR) and AMTRAK provide east-west rail freight and passenger service, respectively. Runways for the Marine Corps Air Station are also used by the Yuma International Airport, offering additional capacity as an air passenger and freight terminal. This strategic location and infrastructure gives Yuma the potential for continued economic growth and the ability to take full advantage of the North American Free Trade Agreement (NAFTA) including opportunities for an inland port.

The Union Pacific Railroad handles all freight rail operations in the Yuma area. Yuma is situated along the Union Pacific Railroad’s primary east-west freight corridor known as the Sunset Route. The Sunset Route handles as many as 70 trains per day. This all-weather freight corridor links the Port of Los Angeles in California with the Port of Houston in Texas. These two ports are the two largest shipping volume, inter-modal, deepwater ports in the United States. The majority of imported and exported goods consumed or produced in the United States passes through these two ports.

Industrial growth along the US/Mexican border region has been influenced by NAFTA and has increased the amount of freight traffic along the border region. Current US/Mexican rail freight traffic in the west moves through the ports of entry at Nogales, Sonora and Mexicali, Baja California. Rail freight through the Port of Entry at Nogales, Sonora is primarily manufactured goods, cement, and copper concentrates from central Sonora. Additionally, intermodal container freight from the deepwater Port of Guaymas, Sonora is increasing as well. Freight rail trains from Guaymas along the Nogales branch of the Union Pacific Railroad has increased significantly since 1993.

Freight along the United States/Mexico border near Yuma enters at the Port of San Luis, approximately 25 miles south of Yuma. Freight is exported and imported through the region primarily by truck. Food and electrical equipment imports have generally increased in recent years. Produce from northwest Sonora supplies much of the United States’ market during the winter months. Additionally, produce is grown year-round in northwest Sonora and the Yuma Valley, and shipments continue year-round. Electrical equipment from the “maquiladoras” in San Luis Rio Colorado, Sonora is shipped through the port of entry at San Luis.

AMTRAK operates three passenger trains in each direction that travel between Los Angeles, California and Orlando, Florida on a weekly basis. The trains stop in Yuma at the Amtrak station (281 Gila Street). There are no services provided at the station. Of the eight Arizona stations served by AMTRAK, Yuma was the seventh busiest in 2010, boarding or detraining an average of approximately ten passengers daily.

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1 A “maquiladora” is a Mexican Corporation which operates under a maquila program approved for it by the Mexican Secretariat of Commerce and Industrial Development (SECOFI).

2 AMTRAK fact sheet, FY2010, State of Arizona
6.6 Aviation Network

Yuma’s history of flight dates to 1911 when Robert Fowler took off from Yuma to set a world record for endurance and distance. Fowler entered a transcontinental air competition sponsored by William Randolph Hearst and landed in Yuma on October 25, 1911 as part of the transcontinental trip. Over 2,000 spectators watched the aircraft land. The next day he succeeded in setting a world record by reaching Florida.

Afterward, in 1925, the Yuma Chamber of Commerce (YCC) went to work to secure an airport for Yuma. Forty acres of land were acquired from the federal government. Afterwards, the Chamber’s Aviation Committee decided another 160 acres was needed to create a first-class landing field in Yuma. Another 640 acres of government land were leased to Yuma County with the support of a Yuma Aviation Bill signed on February 27, 1928. In June of that year, the military announced that a United States meteorological and aeronautical station would be constructed and would be manned by four army personnel, marking the first military presence at Yuma’s airport.

The outbreak of World War II transformed the civilian airport into the Yuma Army Airfield. Construction of facilities began on June 1, 1942 and was activated on December 15 of the same year. The base was closed on November 1, 1945. After the war, the airfield was turned over to the Department of the Interior as a headquarters for the Bureau of Land Reclamation.

On January 1, 1954, Yuma County Airport was reactivated by the United States Air Force’s Air Defense Command as a training facility. The Yuma County Airport was re-designated Yuma Air Force Base. Later on it was renamed as Vincent Air Force Base and transferred to the Navy on January 1, 1959. Finally, on July 20, 1962, the base designation was changed to its current designation as Marine Corps Air Station-Yuma (MCAS)(1).

MCAS-Yuma is currently the busiest air station in the Marine Corps, offering excellent year-round flying conditions and thousands of acres of open terrain for air-to-ground weapons ranges and associated restricted airspace for military flight operations.

(1) MCAS Yuma is currently programmed to become the Marine Corps’ initial operating base for the F-35B variant of the F-35 Lightning II Joint Strike Fighter.
Yuma International Airport

The Yuma International Airport is managed and operated by the Yuma County Airport Authority, Inc. (YCAA). Under Arizona Statutes, a state “Airport Authority” is an independent public agency and a non-profit organization. The YCAA leases the airport’s land from Yuma County on a fifty year lease that currently continues through December 2057.

The YCAA has two commercial passenger airlines: United Airlines through United Express, and US Airways through US Airway Express providing service to Los Angeles International Airport (LAX) and Phoenix Sky Harbor Airport (PHX)(1).

The Airport also has two fixed base operators (FBOs) that provide services to general areas (GA) of aircraft operators such as aircraft fueling, maintenance, storage, light aircraft maintenance, rental car arrangements and catering services. The FBOs currently operating at the Airport are Care Flight Aviation Center, and Million Air Jet Center. Additional aircraft storage hangars, including box hangars, T-hangars, and T-shades for rental and a complimentary wash rack are available for use by base aircraft owners(1).

Airstrips

An airstrip or airfield is a kind of airport that consists only of a runway with perhaps fueling equipment. They are generally in remote locations and often used for agricultural purposes. Some airstrips and airfields in Yuma County are abandoned, but some of the active ones are used in a limited capacity privately or by the military. Table 6 below lists the airports and airfields in Yuma County.

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Aircraft Operations</th>
<th>Number of Runways</th>
<th>Use Ownership</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCAS/Yuma International Airport</td>
<td>6 miles from Yuma Center</td>
<td>211,236 (2010)</td>
<td>4</td>
<td>Military/Public</td>
</tr>
<tr>
<td>Rolle Airfield</td>
<td>5 miles from San Luis</td>
<td>3,050</td>
<td>1</td>
<td>Public</td>
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<td>Somerton Airport</td>
<td>3 miles from Somerton</td>
<td>100</td>
<td>3</td>
<td>Private</td>
</tr>
<tr>
<td>Laguna Army Airfield</td>
<td>Yuma Proving Ground</td>
<td>Unknown</td>
<td>2</td>
<td>Military</td>
</tr>
<tr>
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<td>4 miles NE of Tacna</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Private</td>
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<tr>
<td>Desert Valencia Ranch Airport</td>
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<tr>
<td>Dateland Airfield</td>
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<td>Unknown</td>
<td>Private</td>
</tr>
<tr>
<td>Auxiliary Airfield-2 (Aux-2)</td>
<td>Barry M. Goldwater Range</td>
<td>Unknown</td>
<td>1</td>
<td>Military Training Only</td>
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<tr>
<td>Morris and Sons AG Air</td>
<td>6277 W County 12th Street, Yuma</td>
<td>Unknown</td>
<td>1</td>
<td>Private</td>
</tr>
<tr>
<td>Tri-Rotor Ag Service</td>
<td>18679 S. Avenue D, Yuma</td>
<td>Unknown</td>
<td>1</td>
<td>Private</td>
</tr>
</tbody>
</table>

Table 6: Airports and Airfields in Yuma County

(1) www.yumainternationalairport.com
Airport Roadways

Interstate 8 is the east-west corridor from Yuma toward San Diego to the west and toward Phoenix to the northeast. The airport is located in the southern portion of the City of Yuma and is accessible via Highway 95 or Interstate 8 from the downtown area. The Airport is bordered by:

- East 32nd Street / Highway 80 / County 11th Street to the north
- Avenue 3E to the east
- County 14th Street to the south and
- various roads, including 4th Avenue, Avenue 1E (Arizona Avenue) and 40th Street

The on-Airport terminal loop roadway off 32nd Street and Pacific Avenue to the north of the passenger terminal connects the terminal curb-front, various parking areas and rental car facilities and serves as the link between the regional highway system and the terminal area.

Yuma International Airport Master Plan

The goal of an Airport Master Plan is to provide guidelines for future airport development that is financially, technically and environmentally feasible. The National Environmental Policy Act of 1969 and Federal Aviation Administration (FAA) Order 5050.4B, National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions, provides guidance on evaluating environmental impacts when implementing actions at public-use airports.

Three categories of environmental analysis and review relevant to airport development are outlined in NEPA. Projects proposed for implementation by an airport operator and subject to NEPA review are assessed based on their potential to cause significant environmental impacts. The three categories of environmental review are:

- **Categorical Exclusions** – Projects that are categorically excluded have been found to have no potential for significant environmental impacts under normal circumstances.

- **Actions Normally Requiring an Environmental Assessment (EA)** – Projects normally requiring an EA are those that have been found through experience to sometimes have significant environmental impacts.

- **Actions Normally Requiring an Environmental Impact Statement (EIS)** – Major actions that will significantly affect the environment must be assessed in an EIS. In addition, if an EA determines that a project will have significant impacts, the FAA will prepare an EIS to further investigate the project’s potential environmental impacts.

The major product of the master planning process is the Airport Layout Plan (ALP), which shows the existing and ultimate planned development through the planning horizon. Federal aviation regulations require that an airport operator submit environmental review documentation of the planned development for FAA review and approval if the airport operator plans to apply for federal grants to fund development depicted on the ALP.
Aircraft Noise

Aircraft noise originates from both the engines and the airframe of an aircraft, but the engines are by far the most significant source of aircraft noise. Although noise from propeller-driven aircraft (mostly commuter and general aviation aircraft) can be annoying, the primary source of disturbing noise from the airport is jet aircraft. Because none of the proposed Airport Development Plan (ADP) projects are airfield capacity projects, a detailed noise analysis was not completed as part of the Master Plan Update. The Department of Defense is currently in the process of preparing an EIS to evaluate the impacts of basing the Joint Strike Fighter aircraft at MCAS-Yuma. As part of that EIS a detailed noise analysis for MCAS-Yuma and the Airport will be completed.

Compatible Land Use

Federal agencies have adopted guidelines for compatible land uses and environmental sound levels in airport areas. Land use is normally determined by zoning codes such as residential, industrial or commercial. Based on extensive research on the effects of noise on people, noise levels that are incompatible with residential land uses may be compatible with industrial or commercial land uses. The FAA has identified land use compatibility guidelines relating types of land uses to aircraft noise levels. Arizona Revised Statutes (ARS) 28-8461 provides definition relating to airport zoning and regulations while ARS 28-8481 lists military airport operation compatibility, compliance procedures, and land use matrix.

Part 150 of the Federal Aviation Regulation, Airport Noise Compatibility Planning, sets forth compatibility guidelines for residential, public, commercial, manufacturing and recreational land uses. Land adjacent to the airport boundary is categorized as Airport Area Specific Plan commercial, industrial, business park or recreational/open space land use. The City of Yuma and Yuma County\(^{(1)}\) have also identified and adopted a Runway Approach Departure Safety Area/Airport Industrial Overlay District (RADSA/AIOD) for the approaches to Runway 8-26. The Department of Defense has identified Clear Zones and Accident Potential Zones (APZ) as part of its Air Installation Compatible Use Zone (AICUZ) Study for MCAS Yuma.

No development proposed as part of the ADP would occur adjacent to any existing residential or noise sensitive areas. All proposed ADP projects would occur within the current Airport property, and no changes to the airfield would significantly affect the areas exposed to aircraft noise off airport property. Portions of the proposed taxiway parallel to Runway 3L-21R would traverse the APZ for the runway; however, taxiway development is considered compatible with an APZ. Therefore, implementation of the ADP projects would be consistent with planned land uses and is not anticipated to affect compatible land use.

Social Impacts

Aviation development affects not only the natural environment but also the human environment. Therefore, consideration of social impacts is required to determine the potential effects of airport development on the human environment. The types of impacts considered in this overview that could result from airport development include:

- Disproportionately high and adverse human health or environmental effects on minority and low-income populations
- Disproportionate health and safety risks to children
- Relocation of residences and/or businesses

\(^{(1)}\) City of Yuma and Yuma County, Joint Land Use Plan, Land Use Element Amendment, City of Yuma General Plan, Yuma
Social Impacts (Continued)

- Disruption of communities
- Alterations in traffic patterns that may permanently or temporarily restrict traditional community access
- Substantial loss in community tax base

All proposed ADP projects would be implemented on existing airport property and would not require the relocation of residences or businesses or cause community disruption. Because no residential areas are located adjacent to the areas where projects are proposed, no disproportionate effects are anticipated on minority and low-income populations or to health and safety risks for children.

Section 4(f) of the Department of Transportation Act of 1966 specifies that transportation projects cannot take land from public parks, historic sites or wildlife refuges without first determining that there is no reasonable and prudent alternative. Takings can include the physical acquisition of lands or significant noise or air pollution impacts to such lands so as to make the lands unsuitable for their desired use.

Preservation of prime farmland is a priority goal for the U.S. Department of Agriculture and the sponsors of projects with federal support are required to assess the projects’ effects on prime farmland. The ADP projects would be implemented completely within the airport property boundary. Implementation of the ADP projects would not affect farmland.

**Off-Airport Land Use and Zoning**

Off-Airport land uses in the vicinity of the airport are predominantly residential, agricultural and commercial. The airport lies within the city limits of the City of Yuma and has planning areas within its immediate environs. The goal within the South Mesa Sub-Regional Planning Area is to preserve and promote agricultural lands and activities as well as low-density housing. Land use within the North Gila Valley and Yuma Valley Sub-Regional Planning Area is predominately agricultural.
6.7 Visual Corridors

Visual corridors are defined as historic, scenic, gateway or aesthetically pleasing routes that help define the character of Yuma County. A visual corridor can have a variety of characteristics, but primarily they provide vistas of mountains or show important cultural and historic resources. Visual routes also provide visitors their first lasting impression of Yuma and should leave travelers with an aesthetically pleasing experience.

Visual corridors promote putting restrictions on development of marginal lands and mountainous areas of the county in order to maintain rural character. Heavy industrial development should be discouraged and stricter sign regulations applied along these routes. The following is a list of road segments classified as visual corridors. Refer to the Visual Corridors map to see segments of these roads that are designated as visual corridors.

- U.S. Highway 95
- Dome Valley Road
- Telegraph Pass (I-8)
- Laguna Dam Road/Mittry Lake
- El Camino del Diablo
- Martinez Lake Road
- Wildlife Refuge Road
- Red Cloud Mine Road
- Castle Dome Mine Road
- King Valley Road
- Mohawk Pass (I-8)

The Yuma County Zoning Ordinance contains a Visual Corridor Overlay (VCOD) District which can be applied to ensure that lands adjacent or contiguous to Visual Corridors are developed in a manner that preserves, enhances and is in harmony with the natural scenic beauty and rural character viewed by travelers on the corridors. Further, the VCOD District is intended to mitigate potential adverse impacts on the Visual Corridors by adjacent or contiguous land uses. Ensuring the buffering and screening of uses will in turn contribute to and enhance trade, tourism, capital investment and the community’s general welfare. Visual Corridor Development Standards are to be applied to areas identified as Visual Corridors in the adopted Comprehensive Plan.
Map 6: Visual Corridors
6.8 Circulation Policies and Priorities

CPP.1: Yuma County will support those plans adopted by the YMPO Executive Committee as directed by Board Of Supervisors.

CPP.2: Yuma County will support the plans adopted by the Yuma County Airport Authority and Arizona Department of Transportation as directed by Yuma County Board of Supervisors.

CPP.3: Yuma County will maintain a close working relationship with appropriate federal, state, military transportation and aviation management agencies in developing transportation plans.

CPP.4: Yuma County will encourage the coordination of public and private transportation programs and facilities that accommodate increased road traffic volumes and capacities.

CPP.5: Yuma County will give priority to those transportation projects commensurate with land use designations.

CPP.6: Yuma County will continue to require the private sector to bear its share of road improvement financing.

CPP.7: Yuma County will encourage new development to occur where existing transportation facilities are adequate or where necessary improvements will be made as part of the development project.

CPP.8: Yuma County will encourage efficient multi-modal and alternative modes of transportation based on regional needs that are coordinated with jurisdictional plans.

CPP.9: Yuma County will encourage the reduction of private automobile usage and promote the use of public or multi-modal transportation facilities.

CPP.10: Yuma County will advocate development of Recreational Vehicle and Manufactured Home Parks that reflect access to multi-modal or alternative transportation systems.

CPP.11: Yuma County will encourage road design, construction or reconstruction to better accommodate pedestrian and bicycle traffic.

CPP.12: Yuma County will promote Best Management Practices that reduce PM10 and ozone emissions.

CPP.13: Yuma County will advance the use of all modes of travel that contribute to clean air and energy efficiency.

CPP.14: Yuma County will encourage traffic conditions at County road intersections with stable flows or better.

CPP.15: Yuma County will encourage methods of protecting and enhancing the scenic qualities of land uses within corridor boundaries which must be devised and carried out.

CPP.16: Yuma County should consider designating local scenic highway routes, where appropriate, throughout the County following State guidelines.

CPP.17: Yuma County will use standards for corridor protection parallel to those established by the State.
6.9 Circulation Actions

CA.1: Yuma County will require that the impact of proposed developments on the existing roadway system be evaluated prior to approval.

CA.2: Yuma County will recommend transportation projects that minimize conflicts between incompatible land uses.

CA.3: Yuma County will investigate alternative funding sources and obtain equitable fair share contributions from the development community.

CA.4: Yuma County will provide environmentally sensitive transportation systems and future roadway networks.

CA.5: Yuma County will design and construct new county roads to minimize the adverse impact on water quality, sensitive area and resource lands, natural drainage ways and aesthetics.

CA.6: Yuma County will adopt guidelines to protect and plan for designated visual corridors.

CA.7: Yuma County will reduce PM10 and ozone emissions.

CA.8: Yuma County will assist unincorporated communities in improving their transportation systems.

CA.9: Yuma County will conduct an in-depth assessment of the rural transportation deficiencies in unincorporated communities.

CA.10: Yuma County will develop design standards which provide for visual corridors, multimodal, environmentally sustainable and improved rural transportation systems.

CA.11: Yuma County will enforce driveway access point restrictions and provide for traffic flow improvements.

CA.12: Yuma County will incorporate road network designs that discourage non-residential or non-local traffic away from residential areas.

CA.13: Yuma County will develop criteria to foster the use of shared parking.

CA.14: Yuma County will signalize intersections properly.

CA.15: Yuma County will preserve and safeguard scenic routes in the County.

CA.16: Yuma County develop a policy for establishing bicycle routes.