3 – TRANSPORTATION ELEMENT

The Transportation Element provides a coordinated multi-modal system designed to work with the locations of homes, businesses, and other land uses shown in the Land Use Element, Chapter 2 of this General Plan. A transportation system that addresses all modes of travel provides a “Complete Street” network. Complete Streets are designed and operated to enable safe access to all users.

Each portion of this Element is based on earlier planning efforts:
- Public Transit: 2010-2033 Regional Transportation Plan (RTP), Yuma Metropolitan Planning Organization (YMPO), 2010.
- Airport: Yuma International Airport Master Plan, June 2009.

This Element is divided into four sections. The Background and Existing Conditions section provides a brief overview of the situation and status of the five modes in the Yuma area. The Evaluation and Analysis section identifies facility type and location and includes other matters related to the circulation system such as parking facilities and building setback requirements. The Goals, Objectives, and Policies section serves as a guide for developing a coordinated, safe, and interrelated transportation system. The Element concludes with a phased Action Plan for achieving goals and objectives.

BACKGROUND AND EXISTING CONDITIONS

MAJOR ROADWAYS

Yuma is located in one of the forty fastest growing Metropolitan Statistical Areas (MSA) of the United States from 2000 to 2009 and from 2008 to 2009 was the fastest growing MSA in Arizona. Yuma had experienced tremendous growth from 2002 to 2007 but that growth rate, as the rest of the country, has declined in the past several years. The City has targeted road improvements to address growth and is working with state agencies to address other high need roadways and intersections. Traffic system management and operational improvements have been implemented in order to reduce traffic congestion; however, these types of improvements are limited, in both application and effectiveness, and may have only had a moderate effect on traffic congestion for brief periods of time. Most of the City’s roads that are used for cross-town travel were built on narrow rights-of-way and were originally designed to function more for property access than for traffic efficiency.

Much of the City's roadway system is already in place. The grid system of streets is a predominant feature for most of the City. The lack of a complete grid system in certain locations, and/or barriers that interrupt the
grid system, contributes to some of Yuma's circulation problems. There are a number of roadways in the Yuma area that lack pedestrian facilities. There is also a disconnected bikeway system.

The roadways identified in the City of Yuma Major Roadways Plan are identified on the following maps in this chapter.

- Map 3-1: Major Roadways
- Map 3-2: Truck Routes and Hazardous Cargo Routes (this map also identifies the Railroad lines in the Plan area)
- Map 3-3 and 3-6: Scenic/Historic Routes and Gateway routes

**PUBLIC TRANSIT**

Until 1999, there was limited public transit offered in the area. Taxis and intercity buses provided most services with some transportation offered by social service agencies. In 1999, the Yuma County Area Transit (YCAT) system was established and has grown to a mixed demand responsive service and fixed-route system with an annual operating budget of $2.0 million. Ridership typically exceeds 30,000 riders a month. These operations are currently performed by contract with a private operator. Services are provided for the City of Yuma, San Luis, Somerton, Welton, Northern Arizona University (Yuma), Arizona Western College, Cocopah Indian Tribe and some of the unincorporated areas of Yuma County. Local Transit operations are run by the Yuma County Intergovernmental Public Transportation Authority (YCIPTA) as Yuma County Area Transit (YCAT) and Greater Yuma Area Dial-A-Ride.

On December 13, 2010, the Yuma County Intergovernmental Public Transportation Authority (YCIPTA) was formed by the Yuma County Board of Supervisors to administer, plan, operate and maintain public transit services within Yuma County. The YCIPTA is a governmental agency that provides public transit services through the Yuma County Area Transit (YCAT) and Greater Yuma Area Dial-A-Ride. Bus stops are placed every ¼ mile to provide convenience to riders wanting to access routes. Routes do not serve parking lots.

Two types of transit services are provided:

- Fixed Route Transit: transit service that operates on an established schedule and route at regular intervals, providing bus stop-to-bus stop service. Fixed-route transit operates Monday through Friday 6:30 AM to 5:30 PM and Saturday 9:30 AM to 6:30 PM.
  - The system consists of eight separate routes, six of which serve the Yuma Plan area.
  - The Red Route serves Central Yuma through a counter-clockwise circulator route via 4th Avenue.
  - The Orange Route provides a connection to the Colleges and Fortuna-Foothills along a two-way route from the Yuma Palms Transit Center.
  - The Yellow Route provides a connection to San Luis via a two-way route along Highway 95 connecting to the Yuma Palms Transit Center.
  - The Green Route provides a connection to MCAS-Yuma and the Yuma Valley via a clockwise circulator route connecting to
the Yuma Palms Transit Center.
  - The Purple Route provides a connection from the North Cocopah Reservation to the Yuma Valley Transfer Hub along a two-way route along Avenue A.
  - The Silver Route provides a direct connection from San Luis to the Colleges via a two-way route along SR-195.
  - The Gold Route serves the Wellton Area connecting to the Yuma Palms Transit Center and the Violet Route serves the East and West Cocopah Reservations.
- Dial-a-ride: transit service that does not operate on a fixed-route or schedule, uses vans or small buses, and provides door-to-door service at pre-scheduled times to any person and location within the established service area.
  - Dial-a-ride operates throughout Yuma County from Monday to Friday 6:30 AM to 7:30 PM and Saturday 9:30 AM to 7:30 PM.
  - The service is provided to Americans with Disabilities Act eligible County residents.
  - Reservations are requested at least 24 hours in advance.
  - Average monthly ridership on Dial-a-ride for 2009 was approximately 3,000 riders.

The Transit Routes operated by the Yuma County Area Transit are identified on Map 3-4.

**BICYCLING**

Bicycling is a growing activity in Yuma and in the American Southwest. This has been prompted by nearly year round “riding weather,” by an interest in fitness, and in an evolving awareness that bicycling helps reduce emissions harmful to the air quality of our community. As defined in the Bicycle Facilities Master Plan, a bikeway is any road, path, or way which, in some manner, is specifically designated as being open to bicycle travel, regardless of whether such facilities are designated for the exclusive use of bicycles or are to be shared with other transportation modes.

Three types of bikeways exist in the area:
- **Bicycle Route:** A segment of a system of bikeways designated by the jurisdiction having authority with appropriate directional and informational markers, with or without a specific bicycle route number.
- **Bicycle Lane:** A portion of a roadway that has been designated by striping, signing, and pavement markings for the preferential or exclusive use of bicyclists.
- **Bike/Multi-Use Path:** A bikeway physically separated from motorized vehicular traffic by an open space or barrier and either within the highway right-of-way or within an independent right-of-way.

There are many existing bikeways in the City that have been put in place as stand alone projects or in conjunction with new roadway construction or reconstruction. Those facilities are identified on Map 3-5.

There are some bike parking racks located in Yuma, and most of these are at schools. There are a few other bike racks at certain apartment complexes, retail centers such as the Yuma Palms, and the public facilities. However, most places of business do not have bicycle parking facilities. Often bicyclists are forced to lock their bikes to trees or other fixed objects not well designed and/or placed for bike storage. The City’s
Aesthetic Overlay Zoning District requires the provision of bicycle racks for new development.

The City Parks and Recreation Department in coordination with area service clubs conducts bike rodeos. Bike rodeos teach skills in handling bicycles and promote safe bicycling practices. Unfortunately, there is no ongoing bicycle education program in the area. However, as bicycle promotion and education programs are developed, rodeos should be integrated into these programs as a means to both demonstrate the bicycle's potential as a transportation mode and safe bicycling practices.

AIRPORT
The Yuma International Airport is co-located with Marine Corps Air Station, Yuma (MCAS). The civilian air activity consists of regional service to Phoenix and Los Angeles, with two airlines in operation. There are four runways, with two being used primarily for military aircraft and the other two primarily for civilian operations. The current taxiway system at the airport includes full-length parallel taxiways, runway exit/entrance taxiways, and stub taxiways providing access to landside facilities (passenger terminal facilities, aircraft storage facilities, aircraft parking aprons, and support facilities). The passenger terminal building provides five air carrier gate positions, expanded ticketing, and departure areas, as well as a mechanized baggage claim system. There is no single building or facility dedicated solely to air cargo at the airport. The MCAS Yuma provides air traffic control and aircraft rescue and firefighting services for both military and civil aircraft that operate at the Airport. A new air traffic control tower was recently completed by MCAS.

RAIL
There are over 1,800 linear miles of existing railroad right-of-way in Arizona. For the Yuma area, this includes the Union Pacific mainline Sunset Route that traverses southern Arizona and the Yuma Valley Railway that runs from Downtown Yuma to the Gadsden area on a seasonal/tourist basis. The Union Pacific Sunset Route carries freight and passenger service. Union Pacific is improving this line into a high-capacity route (double-tracked throughout Arizona) which will increase its use in the future. The Railroad lines operated in the Plan Area are identified on Map 3-2 in coordination with the Truck and Hazardous Cargo Routes.

EVALUATION AND ANALYSIS

MAJOR ROADWAYS
A major concern of citizens is traffic congestion. Busy roads attract certain land uses and those uses increase traffic on adjacent streets. The Major Roadways Plan establishes an orderly classification and spacing of arterial and collector roadways and sets minimum roadway widths. This ensures that roadways will function at acceptable levels of service and that the costs of roadway improvements are shared with the private sector. Because the Major Roadways Plan anticipates development and the need for expanded roadways, the City can program capital investments that are necessary to meet those needs.
The purpose of the Major Roadways Plan is to set requirements for development of a roadway system which will adequately serve the area when it is fully developed at densities shown in the Land Use Element.

The Roadways Plan is the facility plan for placing street improvement projects into the City's Capital Improvement Program. Needed right-of-way for street improvements should be determined by street classifications noted in this Element. Those important right-of-way decisions should not be made on the basis of short-term traffic projections that do not reflect the full planned development of the area depicted in the Land Use Element. Maintaining continuity of the arterial network minimizes discontinuous intersections and interruptions to the flow of traffic. “T” intersections should be avoided on the arterial network.

Specifically the Roadways Plan:
- Defines street classifications (see summary on following page)
- Designates certain public roads in each of those classifications
- Identifies minimum width of needed public rights-of-ways
- Identifies development standards for improving existing roads and building new roads (construction details can be found in the City of Yuma Construction Standard Details)
- Designates truck routes which require special design attention
- Designates gateway and scenic corridors which require special design attention
- Recommends a local road network which will accommodate Yuma's expected traffic growth
- Fosters a greater coordination between land use decisions and transportation network planning.

The Major Roadways Plan has two main components: the maps (see Maps 3-1, 3-2, and 3-3 at the end of this chapter) and a set of related policies (refer to “Goals, Objectives, and Policies” on page 3-15). The maps show which roads are designated as major roads (freeways, expressways, principal arterials, minor arterials, and collectors), which roads are designated as truck routes, which roads are designated as hazardous cargo routes, which roads are designated as scenic/historic routes, and which roads are designated as gateway routes. All roads fall into a hierarchy of importance based on present and future traffic needs in the community. This hierarchy is called the functional classification system. Within this hierarchy, each type of road has its own function or purpose. At the top of the hierarchy are freeways and expressways, followed by arterials, and then collectors. These three broad categories constitute the “major roads” in the area. All other roads or streets are considered to be “local roads”. The purpose of classifying streets is threefold. First, it alerts the public to streets that have been chosen as the main traffic carriers and thus provides direction in matching land use locations with street character and capacity. Second, it serves as a guide for future street improvements, since each right-of-way allows for the needed number of lanes plus other elements, such as medians. Third, it also helps to determine the type of cost sharing between adjacent property owners/developers and the City in funding road improvements. Traffic projections from the Regional Transportation Plan (RTP) published by the Yuma Metropolitan Planning Organization (YMPO) were used to
help determine the classification needed for each major roadway segment shown in this Plan. These projected traffic volumes are based on anticipated population growth and other factors used as input data for the RTP. Projections included both average day and peak season, and both of these were examined in developing the Major Roadways Plan.

**STREET CLASSIFICATIONS**

**Interstate/Freeways.** Interstate 8 carries traffic across Yuma County and connects Yuma with other cities and other major roads in California and Arizona. Like most other interstate highways, this road is designed to carry high volumes of high-speed traffic to and through an area and now handles over 30,000 vehicles per day according to the 2009 traffic counts. State Route 195, also known as the Area Service Highway (ASH), facilitates travel and goods movement between the U.S.-Mexico border crossing and Interstate 8.

**Expressways.** Expressways may include at-grade intersections rather than grade-separated interchanges as found along freeways. Frontage roads are used in some locations along expressway corridors to facilitate access to nearby commercial property. Expressways are often constructed so that access is limited to signalized cross street intersections. There are several highway corridors in the area that are experiencing enough traffic growth to consider them for future expressway development. Expressways will only allow access at points shown as expressway intersection locations on the Major Roadways Plan (refer to Map 3-1). Other cross streets that may intersect expressways will be designed to either pass over or under the expressway, or the cross street will be terminated when it reaches the expressway right-of-way.

**Arterial Streets.** Arterials connect with freeway interchanges or other arterials and provide continuity through the City. Because these streets are designed to carry large traffic volumes and are designed to be continuous across an urban area, high intensity land uses (e.g., shopping centers, business parks, industrial facilities) locate along these streets. Drivers using arterial streets are typically traveling more than one mile, and are often using these streets to reach a commercial area or workplace destination.

Arterial streets can be further subdivided into Principal Arterials and Minor Arterials. Principal Arterials are often the busiest roads in an urban area, they serve both regional and local traffic movements, and connect directly to freeways or to other roads that connect directly to freeways. Minor Arterials are streets that serve moderate length trips across an urban area but do not act to carry as many vehicles through the area as Principal Arterials serve. Minor Arterials are typically the busiest roads in one part of a City rather than the busiest roads in the entire urban area. Both arterial designs include provision for bikeways.

For some older roadway segments in densely developed parts of the City, application of current Principal Arterial or Minor Arterial street construction standard may not be feasible. Special retrofit street widening designs may have to be used in a few locations where it is not feasible to get right-of-way necessary to meet current City standards. This should not
be done in locations where right-of-way can be obtained and used for road improvements and where no major physical obstacles are in the way of planned road improvements.

**Collector Streets.** These streets are usually shorter in length and have lower traffic volumes than arterials. Collectors are not designed to carry large volumes of traffic from one end of town to the other. Unfortunately, in some cases where arterial streets are congested, collectors are used as alternate routes for arterials and this can create conflicts with local residential traffic. Elementary schools and parks are often located along collector streets and there are often children playing and walking near these roads. Whereas adjacent land uses along arterial streets are often commercial and industrial, which are compatible with high traffic volumes and speeds, land uses along collectors are generally residential in character and are not as compatible with high-speed traffic. A collector street provides a mix of moving traffic and provides property access. These streets are typically designed as intermediate streets located between two arterials. Collector streets may serve as main entrance streets into large subdivisions. Along older collector streets, residential driveways may also make direct connections; however, direct access should not be allowed in new development since this is not compatible with higher speeds and volumes along collectors. Collector street design includes wider shoulders for bicyclists.

The Major Roadways Map (Map 3-1) shows relative locations of collector streets as they are positioned in relation to higher-class roadways (i.e., arterials and expressways). In undeveloped areas, exact location of a collector street will be determined as development occurs. Additionally, collector streets to be built in the area do not necessarily have to be built as straight streets. Collector streets may curve along their route, and in some cases this may be desirable for traffic calming, engineering and/or aesthetic reasons. For some older roadway segments in densely developed parts of the City, application of collector street construction standards may not be feasible. Existing right-of-way may be adequate for the planned road improvements in some situations. On the other hand, in areas that are being redeveloped with commercial or industrial uses expected to create substantial amounts of traffic, the standard right-of-way width should be followed.

**Local Streets.** All public roadways that are not designated as a major roadway as listed above are, by default designated as local streets. These local streets can be a residential or commercial/industrial type. Private driveways to residences usually connect directly to the local streets. The construction of local streets should, where feasible, incorporate innovative designs such as those used in neotraditional-planned developments. Narrower streets with offset parking bays and pedestrian-scale lighting can be used on certain local streets to a “pedestrian-friendly” environment, as well as that for bicycles, and not merely provide for the movement of vehicles. The property access function, which is the primary purpose of local streets, can be served by numerous street designs that use a wide variety of decorative elements (e.g., planters, furniture, decorative pavers).
**ROADWAY CLASSIFICATIONS AND DESIGN ELEMENTS**

**Freeway:** These are major carriers of regional and cross-town traffic that typically have 4 to 6 traffic lanes. Access is controlled with no private property access. Intersections are grade-separated. Access at major streets and arterial roads at two mile spacing.

**Expressway:** These are major carriers of regional and cross-town traffic that typically have 4 to 6 traffic lanes. Access is totally controlled with no private property access. Private property access may be from a frontage road. Intersections are typically at-grade and only at major streets with a preferred one-mile spacing. Continuity and length for cross-region trips (five miles or more).

<table>
<thead>
<tr>
<th>Right-of-way/Intersection R/W flare</th>
<th>Turn Radius</th>
<th>Median</th>
<th>Driveway Spacing Between Drives/From Cross Street</th>
<th>Average Daily Traffic (ADT) Volumes</th>
</tr>
</thead>
<tbody>
<tr>
<td>160 feet/177 feet</td>
<td>50 feet</td>
<td>Yes</td>
<td>N/A</td>
<td>Less than 75,000 vehicles</td>
</tr>
</tbody>
</table>

**Principal Arterial:** These are major carriers of cross-town traffic that typically have 6 traffic lanes. Access from private property is limited and controlled. Intersections can be at-grade or grade-separated with other major roads. Continuity and length for cross-region trips (five miles or more). Where existing development or terrain limitations require a reduced right-of-way design, a Constrained Principal Arterial may be constructed. The minimum right-of-way for a Constrained Principal Arterial is 98 feet.

<table>
<thead>
<tr>
<th>Right-of-way/Intersection R/W flare</th>
<th>Turn Radius</th>
<th>Median</th>
<th>Driveway Spacing Between Drives/From Cross Street</th>
<th>ADT</th>
</tr>
</thead>
<tbody>
<tr>
<td>124 feet/153 feet</td>
<td>50 feet</td>
<td>Yes</td>
<td>300 feet/450 feet</td>
<td>Less than 48,000 vehicles</td>
</tr>
</tbody>
</table>

**Minor Arterial:** These are major carriers of cross-town traffic that typically have 4 traffic lanes. Access from private property is limited and controlled. Intersections can be at-grade or grade-separated with other major roads. Continuity and length for cross-town trips (three miles or more). Where existing development or terrain limitations require a reduced right-of-way design, a Constrained Minor Arterial may be constructed. The minimum right-of-way for a Constrained Minor Arterial is 76 feet.

<table>
<thead>
<tr>
<th>Right-of-way/Intersection R/W flare</th>
<th>Turn Radius</th>
<th>Median</th>
<th>Driveway Spacing Between Drives/From Cross Street</th>
<th>ADT</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 feet/129 feet</td>
<td>50 feet</td>
<td>Yes</td>
<td>100 feet/250 feet</td>
<td>Less than 26,500 vehicles</td>
</tr>
</tbody>
</table>

**Collector:** These are carriers of local traffic that funnel vehicles from local roads to major and prime arterials. Typically they have 2 to 4 traffic lanes. Access is at grade from local and major roads. Access from private property is discouraged. Preferred continuity and length of more than one mile. Where existing development or terrain limitations require a reduced right-of-way design, a Constrained Collector may be constructed. The minimum right-of-way for a Constrained Collector is 64 feet.

<table>
<thead>
<tr>
<th>Right-of-way/Intersection R/W flare</th>
<th>Turn Radius</th>
<th>Median</th>
<th>Driveway Spacing Between Drives/From Cross Street</th>
<th>ADT</th>
</tr>
</thead>
<tbody>
<tr>
<td>80 feet/121 feet</td>
<td>40 feet</td>
<td>No</td>
<td>50 feet/100 feet</td>
<td>Less than 13,500 vehicles</td>
</tr>
</tbody>
</table>

**Local:** These streets are carriers of local traffic with a primary purpose to provide access to private property. They have 2 traffic lanes.

<table>
<thead>
<tr>
<th>Right-of-way</th>
<th>Turn Radius</th>
<th>Median</th>
<th>Driveway Spacing Between Drives/From Cross Street</th>
<th>ADT</th>
</tr>
</thead>
<tbody>
<tr>
<td>58 feet</td>
<td>25 feet</td>
<td>No</td>
<td>25 feet/40 feet</td>
<td>Less than 3,000 vehicles</td>
</tr>
</tbody>
</table>
**Right-of-Way.** Right-of-way refers to the amount of publicly controlled land that is needed for construction, maintenance and operation of roadway facilities. Width of right-of-way should be noticeably wider than the street itself because additional road related items (sidewalks, utility lines, etc.) are usually placed within street right-of-way. In some cases additional right-of-way is obtained to accommodate future road widening and/or to provide buffer areas between traffic and the adjacent land uses. In other cases adjacent land uses have been allowed to use part of the public right-of-way for parking or stormwater retention so that the public right-of-way appears to be more narrow than it actually is. City construction standards require right-of-way “flares” to facilitate turn movements at major intersections. Flares include a gradual widening of the roadway so that right-of-way is wide enough to accommodate additional turn lanes.

There are several ways in which the City can obtain right-of-way. Right-of-way for planned roadway improvements may be acquired through dedication of land at the time of rezoning or subdivision approvals. The City may also purchase needed right-of-way at the time street improvements are identified or at the time of construction.

**Design Speed.** Design Speed is the selected speed which is used to determine and define various geometric design features of a roadway. Geometric design features include: horizontal curvature, vertical curvature, sight distance, lane widths, shoulder width, whether curb-and-gutter is present or not, the minimum allowable distance to a fixed object from the roadway’s edge, and others. The relationship between Design Speed and these geometric features has been established in the American Association of State Highway and Transportation Officials’ (AASHTO) “A Policy on Geometric Design of Highways and Streets”, also known as the “Green Book”, which is a collection of nationwide best practices and guidelines in roadway design.

Not to be confused with “Posted Speed” (“Speed Limit”), the roadway’s legal maximum speed. The Design Speed accounts for a factor of safety in the variation of actual operating speeds, weather, driver ability, vehicle performance, etc., and is typically slightly greater than the Posted Speed.

**Traffic Calming.** Traffic calming is a term used to describe a number of techniques that are typically used to slow traffic down on collector and local residential streets. Traffic calming devices include speed humps, traffic diverters, and traffic circles; however, many roadway treatments and/or management strategies that encourage the motorist to check and reduce speed can be used for traffic calming purposes. Traffic calming devices can also be landscaped and decorated so that they serve both traffic control and beautification functions.

**Truck Routes.** Certain roadways that facilitate access to major commercial and industrial clusters in the area and/or facilitate movement of large trucks though the area should be designated as truck routes (see Map 3-2). Ideally, large trucks should be restricted to higher order...
multilane roads (freeways, expressways, and arterials), and trucks should never use collectors and local streets through residential areas. However, this is very difficult in some parts of the region because there are commercial and industrial uses that need truck deliveries located close to residential uses. Therefore, designation of truck routes should be used to show where most trucks in Yuma should be seen operating most of the time.

All Interstate and US Highways in the area should be designated as truck routes. In addition, all State Highways should be considered for truck route designation and designated as such if they serve major industrial sites. Roadways under local government control may be considered as truck routes if they are cross-town connector streets which serve commercial and/or industrial areas, serve intermodal transportation facilities handling truck traffic, serve truck-related businesses, or for other reasons are considered to be vital roadways for truck traffic flow into and through the area.

Hazardous cargo routes are also designated in the Plan based, in part, on those routes identified in the Yuma County Hazardous Materials Emergency Plan. These routes include: Interstate 8, SR-195, US 95 (portions of 16th Street and Avenue B), the Yuma Expressway and Avenue 3E.

**Scenic/Historic and Gateway Corridors.** Map 3-3 identifies the location of Scenic/Historic and Gateway Routes. Scenic routes may be urban or rural in nature. These routes may include scenic views, they may run along water features, they may traverse an area of especially attractive vegetation, or they may have some other aesthetic quality that makes them attractive to motorists seeking a route for a pleasure drive. Scenic routes should be protected from nearby incompatible land uses, visual clutter, and heavy traffic congestion as much as possible. This protection can and should be provided by use of appropriate zoning designations including the aesthetic overlay district, the application of hillside grading ordinances, strict enforcement of sign regulations, and other appropriate means.

Historic routes can be roads that closely approximate the path traveled by historic groups that passed through the area, roads which are lined with many historic buildings, or both. Historic routes should be protected from nearby incompatible land uses, visual clutter, and heavy traffic congestion that make it difficult or impossible for motorists to view these areas and access nearby historic sites. Historic routes through the area generally follow the Gila and Colorado Rivers and higher ground along the edge of the mesa overlooking the Gila River Valley. Yuma has a rich transportation history along certain routes and three historic districts with many historic buildings lining the streets.

Gateway routes are typically more urban in appearance than scenic routes. These routes indicate a point of change from the interstate highway or open desert environment to an urban streetscape.
环境。这些路线是居民和访客经常使用的道路，而且它们通常是访客进入该地区和城市的第一条道路。Gateway 路线是城市的“前门”，因此，“前门”应始终保持最佳状态。Gateway 路线的外观尤其重要，因为它有助于营造一个愉快的驾驶体验和对驾车者停车在尤马的第一印象。这些路线也应保持最高标准。像风景路线一样，Gateway 路线应通过使用适当的分区保护，包括美观覆盖区和严格执行标志条例。Gateway 路线也可能是历史和/or 风景路线。

Parking Facilities。在主要道路上禁止路边停车，以保持容量并确保自由流动的交通。在一些在实施路边停车规定之前已开发的地区，可能需要允许某些路边停车以服务现有企业。然而，随着社区较老部分的企业进行改造和扩张，希望这些企业能够提供与新建设的业务在城市中根据城市分区法规所要求的路边停车和装货区。路边停车和装货区的规划旨在减少街道拥堵和交通危险。分区法规设置了最低标准来保证足够的路边停车和装货区，根据土地使用类型提供。

Building Setbacks。建筑退让指城市分区法规要求建筑物与财产线之间的距离。分区法规还定义了一个特殊退让区域，称为可视三角区，用于限制沿街道交叉路口的建筑施工。分区退让与道路宽度的确定相辅相成，以确保建筑物不会因未来道路改善而与计划的道路宽度发生冲突。所有新建筑和要求的停车设施都应在从计划道路宽度线而不是现有道路宽度线测量的退让线后面建造。

Pedestrian Facilities。主要街道的改进包括行人过街设施。人行道需要位于街道的两侧，根据尤马市建设标准详细图和尤马市分区法规。安装在街道两侧的人行道标准同样适用于道路桥梁、立交桥和立交桥。人行道的最小宽度必须符合《美国残疾人法案》(ADA)规定以及城市法规和建设标准。
streets shall be constructed with parkways and the sidewalks shall be constructed immediately behind the curb on this roadway type. All new road construction and roadway widening projects should at least include sidewalks that meet the minimum widths shown in the City Construction Standards. Sidewalks should, consistent with current practice and codes, be designed and ultimately installed so that they are continuous throughout each subdivision.

**Street Naming and House and Building Numbering.** City streets are named and property addresses are assigned according to the City’s street naming and property addressing policy (R2002-22, Adopted June 19th, 2002). These policies are intended to make the 911 Emergency System, mail delivery, and maintenance services more efficient by creating a uniform method for assigning addresses in the City.

The major features of these policies are as follows:

- 1st Street is used to divide the City into north and south sections
- 1st Avenue is used to divide the City into east and west sections
- Roadways running east and west are named street, place, and lane in that order (e.g., 20th Street, 20th Place, 20th Lane in that order from north to south)
- Roadways running north and south are named avenue, drive, and way in that order (e.g., 45th Avenue, 45th Drive, 45th Way in that order from east to west)
- Streets and Avenues should be typically located 660 feet and 330 feet apart, respectively.

Unlike the north-south roads in the west half of Yuma which have a number assigned to them based on their distance west of 1st Avenue, north-south roads on the east side of Yuma are named, not numbered, to avoid conflict with numbered north-south streets to the west.

All public roadways should be named and all property addresses should be assigned in the City based on these policies. Exceptions could potentially cause some confusion for 911 Emergency system. Adherence to these policies throughout the area will also make it easier and more efficient to provide urban services.

**PUBLIC TRANSIT**

Public transit adds flexibility to the transportation system, represents an energy efficient way to travel, and increases mobility of the young, the poor, the elderly, and individuals with disabilities. Public transit also is an alternative mode of transportation for many professionals and college students in Yuma. There are many requests from employees of large employers, such as Johnson Controls, YPG, and others who are interested in van pools or commuter express routes. The interest now is to provide service at peak times and find ways to provide a more cost efficient and effective transit system. Circulator routes provide service if headways can be reduced to 30 minutes or less. Commuter and shuttle services for many transit users are becoming more popular. Many agencies, like Arizona Western College (AWC), Yuma Private Industry...
Council (YPIC), Az-Tec High School, Juvenile Court, SMILE independent living, provide smartcards to their students/clients, etc. Smartcards are an electronic chip bus pass that has trips pre-loaded. These are provided at a discount to students at Az-Tec and other agencies as a pilot program.

The YMPO 2033 Regional Transportation Plan includes specific Short and Long Range Transit Plans to provide enhanced accessibility to the system. These plans include increasing service frequencies on existing routes, creating new circulator routes in Yuma, San Luis, Foothills, Mesa Del Sol and Wellton, designing and constructing a multi-modal transit center, and establish a Transit Authority. Map 3-4 identifies the transit routes currently in operation.

**Bicycling**

The vision of the Bicycle Facilities Master Plan is a unified system that provides bicyclists with safe, convenient, accessible facilities. The system promotes bicycling through a well marked, mapped and publicized bike network.

The Bicycle Facilities Master Plan identifies the routes, lanes, and paths needed to provide a safe and convenient bike system (see Map 3-5). The plan includes a higher density of bikeways in the urban core and more widely spaced bikeways in the outlying areas. This bikeway system is intended to provide adequate and convenient bicycle commuting and recreation possibilities for citizens and visitors throughout the area.

Through the public participation process, specific values were identified that the City of Yuma Bicycle system should incorporate: Safety, Convenience & Accessibility, Connectivity and Information. Goals and Objectives were identified building on these values and are included in the Goals and Objectives section of the Transportation Element. In addition to the Bike Routes, Bike Lanes and Bike/Multi-Use Paths identified, the following facilities were listed:

- Bicycle Crossings – A bicycle facility designed to allow bicyclists to safely cross major intersections. Options to increase the safety or intersections include: unsignalized, signalized, at grade crossings or grade separated crossings and may, in rare cases, include mid-block crossings.
- Bicycle Stations – A bicycle facility that offers secure bicycle parking and other amenities such as lockers, changing rooms and shower facilities. These facilities are to be built in conjunction with transit stations and major public destinations.

**Airport**

According to the Yuma International Airport Master Plan, aviation activity at the Airport, including commercial, military, and civilian, is expected to exceed regional and national growth rates over the next 20 years. The growing local and regional population and economy will sustain this long-term growth. There will have to be improvements made to the existing
facilities at the airport to accommodate this growth. The Master Plan recommends airside improvements for taxiways, instrument approaches, and airfield lighting, and landside improvements for air cargo, passenger terminal, and general aviation areas.

The City and County should work together with the Airport Authority to attract and keep affordable air transportation. Changes in the regional air transportation industry have created high cost for commercial air transportation in Yuma County. As this is a national problem, the Yuma community needs to encourage and support efforts of local, state, and federal agencies to bring about changes in the airline industry that will create more affordable rural airline service.

RAIL
The 2010 Statewide Rail Framework Study identifies a number of potential activities that could impact rail in the Yuma area: expanded deep water ports, reopening of the Wellton Branch and an inland port. Mexico is considering expanding their deep water port capabilities with an expansion of the port at Guaymas and/or the construction of a new deep water port at Punta Colonet. If either occurs, freight traffic through the Yuma area is likely to significantly increase. Another opportunity discussed is the reopening of the Wellton Branch. This former Amtrak line that ran from the Wellton area to Phoenix could provide passenger and freight service directly into the Phoenix area. This line could also serve as part of the route to connect a High Speed Rail line from Phoenix to San Diego. An inland port provides a location where containers from congested maritime ports are directly shipped to the inland port for processing. Following processing there are multiple options for further distribution on freight traffic: rail, truck and air travel. The Yuma area is considered a prime location for the development of an inland port with multiple transportation opportunities including highways, rail and the international airport.
GOALS, OBJECTIVES, AND POLICIES

**Goal 1.0:** Provide a complete, safe and efficient system for transporting persons, goods, and hazardous materials.

**Objective 1.1:** Achieve a coordinated and cooperative transportation program between the City, County, and other governmental agencies.

**Policy 1.1.1:** The City, in cooperation with the County, YMPO and other governmental agencies, shall implement standards and acquisition procedures that are uniform throughout the urbanized area for rights-of-way, truck routes, signalization, walkways, and bikeways.

**Policy 1.1.2:** The City shall continue to encourage the development of transportation improvements that meet City Standards in unincorporated areas that are near the City and within the planned urban area.

**Policy 1.1.3:** The City shall establish a process for completing timely updates to the Transportation Element and for coordinating it with other General Plan elements and other related plans.

**Objective 1.2:** Develop and maintain a transportation network that provides reasonable and efficient access throughout the community and supports existing and expanding economic activities.

**Policy 1.2.1:** The City shall continue to develop a system of streets that meet the transportation needs of neighborhoods, the City, and the region.

**Policy 1.2.2:** The City shall plan, design and operate all transportation facilities to enable safe and convenient access for all users, including motorists, pedestrians, bicyclists and transit riders.

**Policy 1.2.3:** The City shall continue to cooperate with other government entities to develop a regional system of streets and highways.

**Policy 1.2.4:** The City shall program its street network extensions and improvements based on the development provisions of the Land Use Element.

**Policy 1.2.5:** The City shall encourage improved safety and capacity along major roadways by limiting points of access, installing center medians along existing major roadways with high accident rates and along all new major roadways, and developing effective signalization programs.

**Policy 1.2.6:** The City shall maintain a hierarchy of principal and minor arterials based principally upon section and mid-section lines.

**Policy 1.2.7:** The City shall continue to update within the capital improvements program its schedule of ongoing maintenance
to existing streets, including curbs, gutters, and sidewalks where needed.

**Policy 1.2.8:** The City shall aggressively pursue roadway maintenance and construction projects through the ten-year capital improvement program.

**Policy 1.2.9:** The City shall continue to apply, and update when necessary, guidelines and standards for the design and construction of major roadways and other major transportation facilities.

**Policy 1.2.10:** The City shall require that all roadway construction projects include landscaping and bicycle facilities as noted in the Bikeway Facilities Master Plan and the City Zoning Code.

**Goal 2.0:** Develop transportation corridors that are attractive and maintained to the highest standards.

**Objective 2.1:** Protect roadways designated as Gateway and Scenic/Historic Routes from nearby incompatible land uses, visual clutter, and traffic congestion.

**Policy 2.1.1:** The City shall implement special design guidelines for public street improvements that improve the visual appearance of the roadway through the use of enhanced streetscape design.

**Policy 2.1.2:** The City shall ensure that adjoining properties are developed in a manner that is compatible with streetscape enhancements and preserves the scenic quality of the mountain, valley, and/or desert environment.

**Objective 2.2:** Create and include design elements in roadways, transit facilities, and multiuse pathways that incorporate landscaping, visual elements, and public art.

**Policy 2.2.1:** The City shall implement landscaping guidelines for streets, medians, and parkways that address maintenance, design review, water conservation, and safety factors.

**Policy 2.2.2:** The City shall establish and implement a transit facility design that complements the existing streetscape and includes architectural features that reflect local style.

**Policy 2.2.3:** The City shall provide landscaping and public art displays with the installation of traffic calming devices where appropriate.

**Policy 2.2.4:** The City shall support visual enhancements to the Interstate 8 overpasses and interchanges that reflect the history of the Yuma community.

**Objective 2.3:** Enhance roadways by reducing and minimizing visual clutter and obstructions.

**Policy 2.3.1:** The City shall require the under-grounding of power lines that are less than 69-kilovolt (69kV) and the co-location of electrical facilities to eliminate the proliferation of electrical poles on both sides of a street.
Policy 2.3.2: The City shall require that all roadway construction projects include the under-grounding of utility lines less than 69 kV.

Goal 3.0: Promote a fixed route public transit system.

Objective 3.1: Provide mobility to the young, elderly, and disabled persons and to people having no other travel options.

Objective 3.2: Support economic vitality by enabling citizens to commute to their places of employment.

Objective 3.3: Provide transportation options to citizens to reduce traffic congestion and improve air quality.

Objective 3.4: Coordinate with YMPO to provide transit facilities such as bus stops and passenger shelters to help support and encourage fixed route transit services.

Objective 3.6: Coordinate with the school districts and charter and private schools in implementing the transit system.

Goal 4.0: Create a system of bicycle facilities that provides for the safety of all types of bicycle users.

Objective 4.1: Increase the number of children and adults who receive bicycle safety and skills training.

Objective 4.2: Provide and maintain adequate sight distances between bicycle facilities and intersecting streets and alleys.

Objective 4.3: Where possible, bicycle facilities should be separated from vehicular traffic on high volume urban roadways.

Objective 4.4: Provide appropriate grade transitions, levels of lighting, and surveillance where appropriate.

Goal 5.0: Provide and maintain an attractive, diverse, and accessible system of bicycle facilities that meets the needs of the city’s residents, businesses, and visitors.

Objective 5.1: Establish a program of regularly inspecting and maintaining all bicycle facilities.

Objective 5.2: Coordinate bicycle facilities with transit stops and transfer locations.

Objective 5.3: Maximize the use of existing and future canals, utility corridors, and other linear easements as rights-of-way for bicycle facilities.

Objective 5.4: Preserve adequate rights-of-way for future bicycle facility development.

Objective 5.5: Identify the needs and requirements of bicycle facility users (bicycle, pedestrian, equestrian, etc.) to promote compatibility among the various user groups.

Objective 5.6: Define the appropriate character and type of bicycle facilities based on adjacent land use, available rights-of-way, natural terrain, and user needs.

Objective 5.7: Establish development requirements to require new non-residential projects to provide bicycle parking facilities.
Goal 6.0: Develop a plan for locating bikeways to link homes, schools, parks, workplaces, and other important city features.

Objective 6.1: Develop a prioritized list of bicycle facility construction projects.

Objective 6.2: Define specific funding mechanisms for bicycle facility design, implementation, and maintenance.

Objective 6.3: Establish bicycle facility linkages that connect bicycle rider destinations and originations.

Objective 6.4: Develop bicycle facilities connecting to and along historic trails where possible.

Objective 6.5: Establish development requirements for all new residential developments to provide bicycle facility connections to any and all city parks, trails, or open spaces within a one-half-mile radius of the development.

Goal 7.0: Continue to expand and promote public awareness of bicycle related opportunities, laws, and regulations among city residents and visitors.

Objective 7.1: Increase the knowledge of bicycling opportunities among residents and visitors by publishing highly accurate and regularly updated mapping efforts.

Objective 7.2: Increase the compliance of bicyclists and motorists with bicycle related laws and regulations through education programs and public service announcements.

Objective 7.3: Promote a program to use volunteer maintenance for bicycle facilities, such as an "adopt-a-path" program.

Objective 7.4: Develop public and private partnerships to enhance joint sharing of bicycle facilities.

Objective 7.5: Conduct attitudinal surveys to measure participant satisfaction and make necessary adjustments to programs and activities.

Objective 7.6: Encourage bicycling as a daily transportation method for people of all ages.

Goal 8.0: An expanded freight and passenger rail network that provides personal and economic opportunities for the Yuma area.

Objective 8.1: Participate in efforts to develop High-Speed Rail in Arizona.

Objective 8.2: Support enhancements, improvements and expansion of rail lines through or connecting to the Yuma area including the Sunset Limited route and Wellton Branch.

Objective 8.3: Promote the development of inland ports that take advantage of the intermodal transportation options in the Yuma area.
<table>
<thead>
<tr>
<th>Phase</th>
<th>Project</th>
<th>Responsible Agency/Department</th>
<th>Funding Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 5 Years</td>
<td>Amend the zoning code to require new buildings to be constructed at or behind setback from the planned right-of-way rather than existing.</td>
<td>Community Development</td>
<td>General</td>
</tr>
<tr>
<td>1 - 5 Years</td>
<td>Amend the zoning code to require bicycle parking facilities for all new multi-family, office, commercial and industrial projects.</td>
<td>Community Development</td>
<td>General</td>
</tr>
<tr>
<td>1 - 5 Years</td>
<td>Amend the zoning and subdivision code to require all new residential developments to provide bicycle facility connections to any and all city parks, trails, or open spaces within a one-half-mile radius of the development.</td>
<td>Community Development</td>
<td>General</td>
</tr>
<tr>
<td>1 - 5 Years</td>
<td>Evaluate and update the Major Roadways Plan and technical guidelines</td>
<td>Community Development/Engineering</td>
<td>General</td>
</tr>
<tr>
<td>1 - 5 Years</td>
<td>Develop a prioritized list of bicycle facility construction projects.</td>
<td>Community Development/Engineering</td>
<td>General/Grant</td>
</tr>
<tr>
<td>1 - 5 Years</td>
<td>Establish a program of regularly inspecting and maintaining all bicycle facilities.</td>
<td>Utilities/Parks</td>
<td>General</td>
</tr>
<tr>
<td>1 - 5 Years</td>
<td>Complete an inventory of roadways lacking pedestrian facilities (Complete Streets).</td>
<td>Community Development/Engineering</td>
<td>General</td>
</tr>
<tr>
<td>1 - 5 Years</td>
<td>Promote fixed route transit system, including bus lane/bus stop rights-of-way</td>
<td>YMPO/Engineering</td>
<td>Federal/State</td>
</tr>
<tr>
<td>1 - 5 Years</td>
<td>Install pedestrian improvements on roadways not meeting construction standards.</td>
<td>Engineering/Community Development</td>
<td>General</td>
</tr>
<tr>
<td>1 - 5 Years</td>
<td>City Council to apply the Aesthetic Overlay Zoning District where appropriate.</td>
<td>Community Development</td>
<td>General</td>
</tr>
<tr>
<td>6+ Years</td>
<td>Develop an &quot;alternate modes plan&quot; that will address air, rail, intercity bus, &amp; walking as well as freight movements thru the City.</td>
<td>Community Development</td>
<td>General</td>
</tr>
<tr>
<td>6+ Years</td>
<td>Evaluate and update the Major Roadways Plan and technical guidelines</td>
<td>Community Development/Engineering</td>
<td>General</td>
</tr>
</tbody>
</table>