

3.2 Circulation Element

3.2.1 GOALS

1. Encourage public safety through appropriate street design.
2. Improve "Level of Service" through coordinated street design, signal spacing and access management within the community and the surrounding region.
3. Plan and provide for alternative methods of transportation.

3.2.2 PURPOSE

The purpose of the Circulation Element is to summarize the existing street and roadway conditions. It also provides guidance and goals for public transportation, multi-modal pathways, and other modes of transportation. This element also lists and defines the different street classifications and maps the future roadway network. The intent of this element is to coordinate the City's streets with both existing land use and proposed future land use to provide mobility and access. It also guides where infrastructure should be upgraded to facilitate the efficient movement of people, goods and services within the City of Eloy.

3.2.3 EXISTING CHARACTER

Within the City's boundaries, there are approximately 25 miles of existing paved roadways. These roads vary in width, pavement composition and condition. Some roads are in serious need of repair while other roads are newly constructed or have recently been resurfaced.

The City's downtown was initially oriented in a radial street pattern. This design was later modified into a grid pattern with arterials planned at each mile. This situation has led to offset intersections as well as five (5) five-legged intersections on Frontier Street, which are a hazard to both vehicles and especially pedestrians. The confusion that these types of intersections create can be the cause of accidents and/or serious injury/death as traffic volumes increase.

Roadways

The local roadway network is based on the one-mile grid system originally established in Pinal County. There are six basic street classifications used by the City, specifically: Interstate Freeways/State Highways; Major and Minor Arterials; Major and Minor Collectors; and Local Streets.

Airport

The Eloy Municipal Airport was opened to the public in February 1969 and is a general aviation facility. The Eloy Municipal Airport is located approximately three miles northwest of City Hall and encompasses approximately 91-acres in area. The airport was initially constructed by the Air Force for training purposes. Estimated air traffic using the airport is approximately 28,000 operations annually. It has one runway approximately 3,900 feet in length and 75-feet wide. The airport has five conventional hangers and twelve T-hangers with a parking apron 150-feet by 300-feet.

The Eloy Municipal Airport is currently used for general aviation and skydiving activities, with no scheduled services to other locations. Recommendations for future upgrades to the airport to meet potential and desired demand includes the relocation of Taxiway "A", drainage improvements, extension of the runway, and lighting improvements.

Multi-Use Pathways

Currently, there are 95 miles of existing pathways and trails within Eloy's Planning Area. These pathways currently include the full complement of dirt pathways to sidewalks.

Public Transportation

The only public transit access in the City occurs through the connection of Central Arizona Regional Transit(CART) that extends limited service (twice per day) down Interstate 10 to serve the recently relocated Greyhound stop at Love's Truck Stop, located at the northwest corner of Sunland Gin Road and Arica Road. The recently completed a transit feasibility study to identify corridors and routes that would serve the City's population with access to desired area-wide destinations. A circulator for downtown and routing along Frontier to Casa Grande is shown on Map C-1, Circulation. The closest Amtrak stop is located at 19427 N. John Wayne Parkway in the City of Maricopa. Amtrak's Sunset Limited, which operates between Los Angeles and New Orleans, stops in Maricopa at night on Tuesday, Thursday and Sunday from east to west and in the morning on Monday, Thursday and Saturday from west to east.

3.2.4 DISCUSSION

Circulation Plan

The City of Eloy's circulation system is shown on Map C-1, Circulation and includes the roadway network with its recommended characteristics as discussed below.

Roadway Network

The roadway system consists of a hierarchy of streets, which range in widths and traffic volume capacity as shown on Table C.1, Roadway Functional Classification & Characteristics. For example, an arterial's main function is to carry the largest volume of traffic from collector streets to places of employment, retail, offices, and to the City gateways and then funnel the traffic back to the collectors. Functional characteristics include roadway type, function, right-of-way width, lane configuration, pavement width (curb-to-curb), and average daily traffic (ADT).

Roadway Descriptions

Interstate Freeway / State Routes (Highways)

Freeways and State Routes should connect major metropolitan areas, and carry a high proportion of vehicular travel on a minimum of mileage. Freeways and State Routes should be integrated with arterial streets. Freeways and State Routes generally have full access control and consist of interstate highways, other freeways or U.S./State routes. This class of street is designed to handle higher speeds between 55 and 75 mph as well as between 11,000 and 22,000 vehicle trips per day. The number of lanes should range between three and five (one direction) with a total right-of-way width of 300-feet or greater.

Arterial (Principal - RSR, Major and Minor)

Arterials are major streets that are designed to move large volumes of traffic within each community and between cities and towns and are typically spaced at one-mile or greater intervals. These streets are typically constructed with a total of four to six lanes of traffic, and have a raised or striped median. Access to arterials should be limited to intersections at approximately one-quarter mile intervals and from the driveways of major developments. No on-street parking is allowed on arterial roadways.

These streets are typically designed to handle between 8,900 and 11,740 vehicle trips per day with speeds ranging from 45 to 55 mph. Total right-of-way width for arterials range from approximately 110- to 130-feet.

Collector (Major and Minor)

Collector streets provide mobility and access between local streets and arterials, local streets to other local streets, as well as, allowing access to properties fronting onto the street. Collectors are generally spaced at one - half mile intervals, except in the cases where designated on the Circulation Plan Map to connect Downtown with the Eloy Municipal Airport and to connect Sunland Gin Goad and Toltec Road between Frontier Street and Interstate 10 (I-10). These streets are constructed with a total of two to four travel lanes, and typically have a striped or raised median. Travel speeds on collector streets are typically set at 35 mph. Collector's usually have right-of-way widths ranging from 70- to 80-feet.

Collectors may have on-street parking, although this is typically not permitted near intersections and curb cuts for visibility purposes. Collector roadways designated within the Eloy Planning Area are generally located on the midsection-line boundaries.

Local Road

Local roadways serve local traffic, providing access to adjacent properties and roadways of higher classification. Local roadways usually have two lanes and low travel speeds (25 mph or slower), and allow on-street parking. A typical right-of-way width for a local street is approximately 50-feet.

Future subdivision developments and local street construction may focus on a non-grid internal street pattern to help slow traffic, create visual aesthetics (when coupled with a landscaping theme), create a sense of place and variety within each individual development and create a more pedestrian friendly environment.

Multi-Use Pathway

The purpose of a multi-use pathway system is to provide residents with other transportation alternatives to travel within the community other than a vehicle. Other transportation options include walking, jogging, bicycling, skating, or horseback riding. Non-vehicular travel may provide a wide-range of benefits, such as increased mobility and access as well as enhanced recreational activities, improved air quality, and better personal health.

Table C.1: Roadway Functional Classification & Characteristics

CLASSIFICATIONS	CHARACTERISTICS				
	Primary Function	Configuration (both sides included)	Right of-Way Width	Width Back of Curb-to Curb	Maximum Vehicle Trips Per Day
Freeway/State Route	Mobility	4 and Greater Divided	300+	---	>55,000
Major Arterial (Principal)	Mobility	6 Lanes + Divided Median	130'	124' - 104'	45,000 - 55,000
Minor Arterial	Mobility / Access	4 Lanes + Raised Median	110'	80'	30,000
Major Collector (Commercial)	Access / Mobility	3 Lanes + Two Way Turn Lane	80'	54'	10,000

Minor Collector	Access	2-3 Lanes + Two Way Turn Lane	70'	48'	8,000
Local	Access	Two Lanes	50'	32'	1,000

Source: City of Eloy, January 2020

The multi-use pathway system consists of trails and bike routes/paths. The trails typically consist of shared-use paths that are physically separated from vehicular traffic. These may be paved or unpaved, and may be located within an existing roadway right-of-way or within an existing utility or canal right-of-way or easement.

Bicycle paths are comprised of both trails and lanes. A bicycle lane is a one-way travel lane located along the edge of a paved street. A bicycle trail is a non-vehicular pathway identified for bicycle use by signage only. Bicycle trails are physically separated from vehicular traffic, and may be paved or unpaved.

Aside from the 95 designated miles of trails and pathways, Pinal County's Open Space Master Plan also shows an additional 44 miles of proposed trails. As the City expands into its Planning Area through future annexation and when these areas are developed, an analysis of the proposed pathway system should be completed. Developers should be encouraged to set aside, construct and possibly dedicate pathway network improvements within or adjacent to their development.

Opportunities exist for developing a system of urban multi-use trails along the street, utility, and railroad rights-of-way that could be used for pedestrian, equestrian, and bicycle travel. Potential locations for these trails include Frontier Boulevard (south side), Sunshine Boulevard (west side), Hanna Road (south side), Milligan Road (south side), SR-87 (west side), Toltec Highway (east side), and Sunland Gin Road (west side). In the future, a more comprehensive city-wide Parks, Recreation, and Trails Master Plan could be developed and adopted that will confirm such corridors.

High Capacity Transportation Corridors

A series of recent studies have identified several key transportation corridors for future consideration within the Eloy Planning Area. The Arizona Department of Transportation is currently assessing (through an Environmental Impact Statement) two routing options for a future North-South Freeway. The intent is to connect US 60, in northern Pinal County, to Interstate 10 within the City of Eloy. The City of Eloy supports (through Resolution 19-1454) the W4 Corridor, which utilizes the existing SR 87 roadway and terminates at Interstate 10.

The Intermountain West Corridor (I-11) is intended as a multimodal transportation facility to diversify, support, and connect the economies of Arizona and Nevada, ultimately linking Mexico and Canada. The connection between Phoenix, Arizona, and Las Vegas, Nevada has been analyzed, and the Green Alternative through Eloy (supported by Resolution 19-1457) deviate to the south of I-10 within the Eloy Planning Area as shown on Map C-1, Circulation.

No funding has currently been set-aside for the design or construction of these corridors.

Railroad

The rail line through Eloy was originally constructed by the Southern Pacific in 1880 and parallels Frontier Street. The Union Pacific rail line (also known as the Sunset Route), which was acquired by the Union Pacific in 1996, traverses the southern portion of Arizona, connecting Los Angeles with Tucson, El Paso, Houston, and New Orleans.

Currently, between 45 and 55 freight trains operate through Eloy daily. The largest of the commodities shipped on these trains are Agricultural Products (grains, grain products, and food & refrigerated products); Automotive (finished vehicles and auto parts); Chemicals (Fertilizer, Plastics, Industrial Chemicals, Soda Ash, Petroleum LPG and Crude Oil); Coal (Coal and petroleum coke); Industrial Products (Lumber, construction products, metals, minerals/consumer, paper, other); Intermodal (Domestic and international), Mexico (Autos, intermodal, agricultural, industrial products, chemicals and coal); and some 10,000,000 tons of coal (shipped in) to run the state's power plants.

Currently, the only grade-separated crossings of the Union Pacific in the vicinity of Eloy's Planning Area are the I-10 viaduct west of Toltec and the SR 87 viaduct at Picacho. The at-grade rail crossings occur at Sunland Gin Road, Toltec Highway, Houser Road, Battaglia Drive, Eleven-Mile Corner Road, Main Street and Sunshine Boulevard.

3.2.5 OBJECTIVES

The objectives provide the City necessary direction in order to create and enhance a functional circulation network and to interweave viable alternative transportation modes that could reduce reliance on the automobile.

1. Improve and maintain street safety.
2. Improve and maintain the quality of street surfaces.
3. Manage vehicular access onto the street.
4. Reduce accidents at offset and five-legged intersections.
5. Implement traffic sign upgrades and pavement rehabilitation actions as recommended in the city of Eloy Small Area Transportation Study, for both streets and railroad crossings.
6. Incrementally upgrade existing roadways to comply with the street classification system, as demand warrants.
7. Require new developments to adhere to the street classification system and dedicate adequate right-of-way.
8. Monitoring vehicular accidents, determining their causes and then adopting policies to avoid similar situations in the future.
9. Promote paving/topical treatment of dirt and gravel roads and prohibiting the creation or continuation of unimproved roads, especially as new development occurs.
10. Work with other government entities [e.g., Arizona Department of Transportation (ADOT), Sun Corridor Metropolitan Planning Organization (SCMPO), Pinal County, Central Arizona Association of Governments (CAAG), City of Casa Grande, etc.] to improve and maintain the regional roads, including State Routes and Interstates 8 and 10.
11. Determine and define traffic impact mitigation measures to preserve mobility and access through the City's roadway network.



Circulation Map

Eloy General Plan

Functional Classification

- Interstate
- State Highway
- Major Arterial (130' ROW)
- Minor Arterial (110' ROW)
- Two Lane Collector (80' ROW)
- Union Pacific Railroad

Interchanges

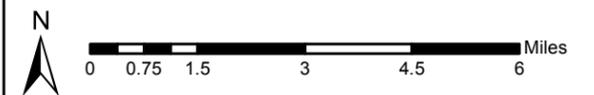
- Existing Interchange
- Potential Interchange

Proposed Transportation Corridors

- Preferred North-South Corridor
- Proposed Interstate 11 Corridor
- Future Transit System Route
- Existing Transit System Route

Reference

- Eloy City Limits
- Eloy Planning Boundary



Disclaimer: This map is furnished for reference purposes only and is not suitable for legal, financial, engineering, or surveying purposes or commitments. The City of Eloy assumes no responsibility for errors, omissions, or inaccuracies presented, and shall have neither liability nor responsibility for any direct or indirect loss or damage in connection with, or arising from, the information on this map. Any conclusions derived from this map are the responsibility of the user.

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