

7.0 CIRCULATION ELEMENT

7.1 INTRODUCTION

The Circulation Element of the General Plan is oriented toward enabling the efficient movement of people, goods and services. The Prescott transportation network also provides connectivity to the immediate region.

7.1.1 Arizona Revised Statutes

Arizona Revised Statutes (ARS) identifies the rights of bicyclists (§28-812) and pedestrians as traffic (§28-792), and establishes legislative intent that people of all ages using all types of mobility devices are able to travel the highways and local streets. Bicyclists, pedestrians, and non-motorized traffic are expected to be on all highways and streets, unless specifically prohibited (§28-733). The Arizona Department of Transportation and local agencies have the responsibility to provide for the safety and accessibility needs of all who have legal access to the transportation system.

7.1.2 Central Yavapai Regional Transportation Plan

The 2006 Central Yavapai Regional Transportation Plan and other studies show that the widening of roads alone cannot address long term transportation and traffic management issues. Prescott seeks to effectively manage traffic and circulation in a manner consistent with its community character and historic values. The future challenge to Prescott is to safely incorporate bikeways, transit, pedestrian amenities and schools into a well functioning integrated transportation network.

If employment and service centers are to locate in reasonable proximity to residential areas, roadway demands and traffic congestion are decreased. Higher density development supports efficient alternative transportation options including transit, bikeways and pedestrian amenities - extending the longevity of existing infrastructure, while expanding transportation choices.

Prescott strives to pursue a comprehensive, integrated, multi-modal approach to transportation planning by integrating land-use and capital improvement planning, and recognizing the long term benefits of alternative transportation means. This includes planning regional and local road networks in coordination with neighboring jurisdictions.

Interconnectivity of streets and alternative transportation options enhances public safety, shorten travel times and reduces congestion during peak hours. Effective traffic management occurs with good overall interconnectivity and traffic dispersion - balancing the overall circulation needs of the community with impacts on neighborhoods.

7.1.3 Traffic Management

Traffic management tools include creation of new roads providing alternate routes as well as integrating access points, traffic calming and other circulation features into roadway designs. To reduce traffic and increase the number of passengers per vehicle, pedestrian amenities, bikeways and convenient parking for commuters are basic necessities. These can be retrofitted into existing street systems and can have ancillary effectiveness in reducing speed and cut-through traffic.

A.R.S. 9-461.05.

2. A circulation element

consisting of the general location and extent of existing and proposed freeways, arterial and collector streets, bicycle routes and any other modes of transportation as may be appropriate, all correlated with the land use element of the plan.

An increasing fraction of the population is unable to drive due to cost, age or ability. With rising automobile costs, drivers may choose to use alternate transportation modes if they are safe, efficient and affordable. The Prescott Bicycle and Pedestrian Plan was adopted in 2003, with a goal of enhancing transportation choices and improving safety with the addition of bicycle routes/lanes and the extension of sidewalks. Some neighborhoods include traffic calming techniques to enhance street safety while maintaining connectivity with other neighborhoods. Prescott's Downtown was enhanced with the addition of traffic calming planters in intersections, which also improve the aesthetics of the streetscape and encourage pedestrian use.

7.2 TRANSPORTATION MODES AND LIMITS

Autos and alternate forms of transportation each have merit. All require different time expenditures, taxpayer funded infrastructure and physical abilities of the user. Each vehicular trip begins and ends with one or more pedestrian trips. Walking is the most commonly used form of non-motorized transportation. Research shows that the average person will walk 5 to 10 minutes to reach shopping or other destinations, excluding walking for recreation. The downtown Prescott area is well suited to this parameter.

Walking to work, school, shopping, parks or other recreational sites is limited within some areas of Prescott due to the lack of a satisfactory sidewalk network. The second most common means of non-motorized travel is bicycling, which enables a greater distance range and better access to some locations than walking. Prescott encourages bicycle trips with a combination of wider pavement, striped bike lanes and signed bike routes. Auto travel allows for longer trips in most weather conditions and is also the most expensive means of travel. The public has traditionally accepted these costs, however, some individuals do not have access to an automobile.

Prescott's greenways and off-road trails offer pedestrian and bicycle commuters a transportation system separate from the roadway network. This reduces the need for new road infrastructure. By separating autos from other forms of transit, fewer conflicts occur and there are benefits to public health and the environment.

7.3 TRAFFIC IMPACTS, TRAFFIC SAFETY AND TRAFFIC MANAGEMENT ISSUES

The 2006 Central Yavapai Metropolitan Planning Organization (CYMPO) Regional Transportation Study establishes that growth within Prescott and throughout the region will create long term traffic management problems. The study, updated approximately every five years, is the blueprint for long term regional transportation planning and improvements.

The study suggests a three phased approach to regional transportation planning with improvements grouped by years; 2006 to 2011, 2012 to 2020 and 2021 to 2030. Most first phase regional improvements have been achieved or are near completion including the widening of State Route 89 in Chino Valley, Side Road improvements, Williamson Valley Road widening, Tribal road connector, Fain Road widening and State Route 89 interchanges. Later phases will include an extension of Glassford Hill Road and a Side Road Connector, both of which may relieve traffic on Highway 89. The 2006 study recommends new regional transportation corridors such as Great Western Blvd (formerly

the Tri-City Parkway), Chino Valley Bypass, Santa Fe Loop, Sundog Connector between Prescott Lakes Parkway and State Route 69, and the Airport Loop Road.

The study also recommends alternative transportation components (public transit, carpooling, bikeways, trails, etc.) and forecasts that an investment in these systems could reduce projected traffic counts throughout the CYMPO planning area. Subsequent study updates will continue to support alternative transportation. A 2012 CYMPO update to the study is currently underway and will likely be adopted by the Prescott City Council.

7.4 TRANSPORTATION PLANNING

On a voluntary basis, Prescott, Yavapai County, Chino Valley, Prescott Valley, Yavapai-Prescott Indian Tribe, Dewey-Humboldt and the Arizona Department of Transportation are partners in the Central Yavapai Metropolitan Planning Organization (CYMPO), which is the designated regional transportation planning entity, whose purpose is to conduct studies, coordinate transportation planning, secure state and federal transportation funds, and prioritize transportation projects funded.

Transportation planning within the City is integrated into the City's capital improvement budget and is coordinated with both land use planning and development review. Transportation needs are a required component in specific area plans where Transportation Services and the Police Department examine traffic calming approaches to provide neighborhood safety and emphasize traffic enforcement. Retrofitting existing roadways with improvements is an important part of transportation planning requiring careful consideration of the potential impacts on neighborhoods.

7.5 TRANSPORTATION NETWORK: ROADWAYS, BICYCLE AND PEDESTRIAN, TRANSIT FACILITIES

7.5.1 Roadway Network

Roads are classified as arterials, collectors or local roads and are further broken down into major or minor roads. There are six functional categories, which may be found in the glossary.

7.5.1.1 Arterials Goals and Strategies

Arterials: *principally for longer distance travel between two points. Direct access to property is a subordinate function. In order to maximize a satisfactory operating level of service without requiring additional lanes, traffic management must concentrate on moving traffic quickly through signalized intersections.*

Goal 1. Establish and maintain a system of arterial streets, which provide a satisfactory level of service during morning and evening peak hours, support alternative transportation (walking and bicycling), and are compatible with land use, grading, slope stabilization, drainage and environmental goals including aesthetics.

Strategy 1.1

Complete the 2012 update of the Central Yavapai County Regional Transportation Study, by coordinating with ADOT and regional stakeholders, to guide the future planning efforts of the Central Yavapai Metropolitan Planning Organization.

- Strategy 1.2** Develop a City of Prescott Transportation Plan for adoption and implementation of recommended goals and strategies to improve arterial traffic movement and safety.
- Strategy 1.3** Support improvement of arterial streets by maintaining pavement quality and surface markings.
- Strategy 1.4** Apply traditional and emerging technologies to extend the life of roadway networks through the use of innovative design and maintenance practices, efficient signal timing and attention to changes in levels of service.
- Strategy 1.5** Balance pedestrian, bicycle and future public transit vehicle movements where appropriate when expanding intersections to include additional turning and through lanes.
- Strategy 1.7** Enhance the aesthetics within street corridors.
- Strategy 1.8** Promote interconnectivity of transportation networks to improve circulation efficiency, disperse traffic and reduce impacts on individual streets.
- Strategy 1.9** Minimize and reduce, where feasible, direct driveway access to arterials.

7.5.1.2 Collectors Goals and Strategies

***Collectors:** generally serve a dual purpose of moving vehicles and individuals from place to place and to accessing fronting property. Commercial collector streets facilitate travel between high traffic generators. Access locations are often controlled or shared.*

Goal 1. Adapt, design or retrofit residential collector streets as feasible to facilitate travel from local streets to parks, schools and arterial streets while maintaining a safe and attractive neighborhood environment.

- Strategy 1.1** Implement strategies to prevent local streets from becoming de-facto collectors where pursuit of a connectivity goal may negatively impact the quality of life for the residents on the local street, and increase demands for police enforcement and traffic calming.
- Strategy 1.2** Minimize direct access to collectors for new residential lots.
- Strategy 1.3** Design residential collectors to facilitate efficient circulation within the neighborhood while discouraging through or speeding traffic, especially from arterial to arterial.
- Strategy 1.4** Design collector streets and adjacent sidewalks to facilitate use by low-speed vehicles, bicycles, pedestrians and to include trails as shown in adopted plans.

Goal 2. Require adequate vehicular and pedestrian access and connectivity within and between residential neighborhoods and adjoining commercial areas by promoting street interconnectivity, identify minor collector streets.

Strategy 2.1 Design streets to meet the needs of emergency vehicles in a neighborhood friendly way while allowing safe on-street parking and safe pedestrian access.

Strategy 2.2 Locate new connector road alignments to facilitate access for business and commercial purposes in a cost-effective manner.

7.5.1.3 Locals Goals and Strategies

Locals: local streets in aggregate comprise the highest total mileage of city streets and have the primary purpose of providing direct access to adjoining properties. These streets range from short cul-de-sacs to the traditional grid system in the downtown. Most residential lots will have at least one entrance onto the local street.

Goal 1. Local street designs should provide access for residential, commercial properties and emergency vehicles while maintaining safety for residents, pedestrians and bicyclists and enhancing the neighborhood environment.

Strategy 1.1 Develop a Traffic Calming Design Guide to be applied to new residential street construction.

Strategy 1.2 Continue to utilize the adopted policy for traffic calming to retrofit residential streets.

Strategy 1.3 Create and allow the use of a variety of appropriate local street cross sections to provide flexibility during design in order to promote diversity of design and neighborhood character.

Strategy 1.4 Encourage the retrofit of existing local streets to enhance safety with attention to appearance reflecting the character of neighborhoods and to reduce four-way intersections where feasible.

7.5.2 PEDESTRIAN AND BICYCLE CIRCULATION

Prescott residents and visitors currently enjoy a network of sidewalks, bicycle routes, bicycle lanes, and multi-use paths. This network may be enhanced with the support of advocacy groups who encourage pedestrian, bicycle and public transit transportation alternatives.

The on-street system is comprised mainly of striped bike lanes, signed bike routes and sidewalks. The striped bike lanes are primarily located on existing arterials and Major Collectors. Sidewalks are typically provided on new local, collector and arterial streets, however, a cohesive pedestrian movement network from neighborhoods, business

areas, schools and other destinations, remains to be developed. Some progress has been made through the Safe Route to Schools program and the Bicycle and Pedestrian Master Plan includes specific policies and locations for recommended projects, while addressing related on-going maintenance needs.

The mountain biking community embraces Prescott due to the high quality of its off-street trail network. This is reflected in the annual Whiskey Off-Road race, which had 1750 registrants in 2012. Many visitors come to Prescott specifically to experience our mountain bike trail system. Biking tourists stay in downtown hotels and ride, not drive, to Prescott's world class mountain biking trails. Safety measures are encouraged while cyclists are traveling to the trails that exist to our west off of Copper Basin Road and West Gurley Street/Thumb Butte Road, and south off White Spar Road (State Route 89).

West Gurley Street and Thumb Butte Road may be made safer with paint applications to the road and bicycle route signage until such time when the planned Butte Creek trail is completed. Due to budget considerations, the recent Copper Basin Road project did not include a bike lane. However, other enhancements, such as bicycle route signage, may be used to provide greater safety to the cycling community.

There is a designated bicycle route between the Mike Fann Community Skate Park and the newly built Granite Creek Park Pump Track with a resulting increase in bicycle traffic between these two parks. As an example of safety improvements that may be made to this designated bike route, additional signage to notify motorists of bicycles on the roadway may be added, along with the addition of shared lane markings on Pleasant Street & Willis Street and upgrading the traffic light at the intersection of Sheldon Street & Pleasant Street to detect bicycles.

7.5.2.1 Complete Streets

Complete Streets is a nationally recognized term that refers to the design and operation of highways and streets to enable all users, including bicyclists, pedestrians, transit riders and motorists, to safely move along and across the roadway. Complete Streets is an approach to interdependent, multimodal transportation facilities that are planned, designed, operated, and maintained to provide safe mobility. Designs are appropriate to the function and context of the neighborhood, whether residential or commercial, and its surroundings. Each highway or street is unique and dependent upon its context.

Basic elements of complete streets include sidewalks, bike lanes (or wide paved shoulders), pedestrian crossing opportunities, median islands, and accessible pedestrian signals. A complete street in a rural area will look quite different from a complete street in a highly urbanized area. But both are designed to balance safety and convenience for everyone using the street.

Careful planning and development of Complete Streets infrastructure offers long-term cost savings for local and state government by reducing automotive travel. By designing for the safety of all users, fewer collisions occur between autos and other forms of transit, reducing the need for emergency services. There are also benefits to public health, the environment and financial benefits to property owners and businesses through increased foot traffic.

A committee may be formed to advance this concept and help Prescott attain a League of American Bicyclists' Bicycle Friendly Community status. The Bicycle Friendly Community status has been awarded to both Flagstaff and Sedona, and may be a contributing factor to tourism in those areas. Much of the groundwork for this coveted designation has been included in the Bicycle and Pedestrian Master Plan.

Additional information regarding the off-street trail system may be found in the Open Space Element.

7.5.2.2 Pedestrian and Bicycle Goals and Strategies

- Goal 1.** Ensure that connecting pedestrian and bicycle circulation facilities are developed and designed with the objective to increase the incidence of shorter transportation and recreational trips taken by riders and pedestrians.
- Strategy 1.1** Update the 2003 Bicycle and Pedestrian Master Plan to reflect current conditions.
- Strategy 1.2** Implement the Bicycle and Pedestrian Master Plan for the City of Prescott through inclusion of projects in the Capital Improvements Plan with emphasis on development and design which increase the number of short trips connecting residential areas with schools and business areas.
- Strategy 1.3** Strengthen partnerships directed toward enhancing pedestrian and bicycle access to local schools.
- Strategy 1.4** Develop programs which educate bicyclists, pedestrians, and motorists about sharing roadways, and promote walking and bicycling.
- Strategy 1.5** Continue acquisition and development consistent with the Bicycle and Pedestrian Plan of separate and multi-use pathways, where feasible, for pedestrians and bicyclists designed to connect popular origins and destinations.
- Strategy 1.6** Promote placement of schools, employment centers and retail in proximity to residential areas to encourage walking, bicycling and transit use.
- Strategy 1.7** Assure adequate maintenance of bicycle and pedestrian facilities.
- Strategy 1.8** Encourage bicycle safety through the application of road surface paint, bicycle route signage and other means as appropriate on a case by case basis.
- Strategy 1.9** Pursue League of American Bicyclists Bicycle Friendly Community status.

- Goal 2.** Accommodate multi-modal options in new development for bicycle, pedestrian and public transit infrastructure.
- Strategy 2.1** Design pedestrian facilities to provide safe access for children, the elderly and handicapped.
 - Strategy 2.2** Require the submittal of pedestrian and bicycle circulation plans as elements of Traffic Impact Analysis required for new development. Assure that adequate bicycle parking facilities are included in designs for new development.
 - Strategy 2.3** Include bikeways and sidewalks in the design of all new roadways where feasible that are consistent with the Bicycle and Pedestrian Master Plan.
 - Strategy 2.4** Encourage the acquisition and development of off-street multi-use routes along creeks, drainages, utility easements, and through parks and open spaces.
 - Strategy 2.5** Where feasible, retrofit existing roadways to provide for bicycle, pedestrian and transit options and to bridge gaps in the existing sidewalk network, especially in the downtown area.
 - Strategy 2.6** Design all new roadways using Complete Streets concepts. Older roadways should accommodate Complete Streets concepts whenever redesign projects occur.

7.5.3 PUBLIC TRANSIT

Public transit could provide a viable mode of transportation for area residents who cannot or choose not to drive. The Central Yavapai Metropolitan Planning Organization (CYMPO) is charged with the development and implementation of a regional transit system. The mission of CYMPO is to provide leadership in planning and promoting a comprehensive multi-modal transportation system that will provide for regional mobility and connectivity that encourages a positive investment climate and fosters development sensitive to the environment.

CYMPO is the designated Metropolitan Planning Organization (MPO) for the City of Prescott, Town of Prescott Valley, Town of Chino Valley, Town of Dewey-Humboldt, Yavapai County and Arizona Department of Transportation. As the regional MPO, CYMPO provides the forum for local elected officials and transportation experts to plan multimodal infrastructure within the CYMPO Planning Boundary area. CYMPO has completed evaluations regarding the feasibility of a regional public transit system. The Regional Transit Needs Study and the Transit Implementation Plan recommend a combination of basic fixed and flexible route transit service with a park-and-ride component.

CYMPO pursues available state and federal funding for implementing a public transit system. The County has provided limited funding for transit in other jurisdictions. Services may be contracted out to private providers, however, providers must be able to meet state and federal guidelines for publically funded transit. A limited private bus

service is provided within the City and is not currently subsidized with public funds. Other funding sources may be available for public entities or non-profit organizations who provide transit services. However, finding a capable provider and providing long term taxpayer funding in an uncertain economy are important issues.

Efficient transit systems depend on cluster development where higher densities create a population base. The Growth and Cost of Development Element of this plan addresses the need for more opportunities for compact development.

7.5.3.1 Transit Goals and Strategies

Goal 1. Plan for, and when economically feasible, implement the regional public transportation system accommodating residents and visitors, including those with special needs.

Strategy 1.1 Identify and pursue dedicated funding sources, to include public and private grants, ridership fees, and other means to support a public transportation program.

Strategy 1.2 Develop secure automobile and bicycle parking, and park and ride facilities to encourage public transportation.

7.6 AIRPORT

Ernest A. Love Airport is operated solely by the City, however, there are regional benefits from economic growth enhanced by air transportation. The 2009 Airport Master Plan provides for facilities and services to accommodate the needs of aviation toward this end. The airport transportation hub attracts relocating and expanding businesses by its ability to deliver people and goods.

In 2001 the City of Prescott, Prescott Valley and Chino Valley entered into annexation boundary agreements to set each municipality's future boundary limits. This is especially important near the airport where all three communities share boundaries. Prescott adopted the Airport Specific Area Plan (ASAP) in 2001 to protect the airport from residential development of nearby vacant land.

Airport operations rely heavily on federal and state-grant funding for major capital improvements and runway maintenance. Future sharing of funding, operations, oversight and benefits of the airport with neighboring jurisdictions may achieve greater expansion and economic vitality.

7.6.1 Airport Goals and Strategies

Goal 1. Enhance the regional transportation role of the airport.

Strategy 1.1 Update the Airport Business Plan to guide the operation and development of the airport.

Strategy 1.2 Enhance access to the airport referencing the Airport Specific Area Plan, Airport Master Plan, and the Airport Area Transportation Study.

- Strategy 1.3** Actively pursue research, marketing and development of the airport as a regional transportation hub.
- Strategy 1.4** Implement improvements to the Airport including, but not limited to, development of a new terminal, redevelopment of on-airport land uses, evaluation/ modification/ improvement of the main airport road entrance and circulation as may most beneficially serve the airport community needs in accordance with current industry standards and practices.
- Strategy 1.5** Create safe multimodal and alternative transportation connections, including bicycle and pedestrian routes, on and off city roadways to the airport and within the airport area.

7.7 TRAFFIC SAFETY

Traffic safety is a shared responsibility among drivers, motorcyclists, bicyclists, pedestrians and other travelers. The majority of collisions in Prescott occur on arterial and collector streets, primarily as rear end, angle and left turn collisions where driver error is involved.

The Public Works and Police Departments partner to improve traffic safety through engineering, education and enforcement. The Prescott Police Department utilizes the latest technologies and innovative techniques to fairly and uniformly enforce traffic laws, ordinance, and regulations.

7.7.1 Traffic Safety Programs Goals and Strategies

Goal 1. Enhance traffic safety through engineering, education and enforcement.

- Strategy 1.1** Continue to maintain a comprehensive collision database and use it to develop annual reports to show number, analysis of type, cause/violation, and time of day for the crashes and injuries occurring on city streets, along with year-to-year comparisons of trends.
- Strategy 1.2** Continue the existing program of monitoring, and adjusting where necessary, speed limits on arterials and collectors to assure limits are imposed in a uniform and reasonable manner using nationally accepted engineering standards.
- Strategy 1.3** Identify a set of objectives for sight distance and other safety recommendations, including improvements and programs to allow evaluation of their effectiveness.
- Strategy 1.4** Encourage educational programs directed to motorists, motorcyclists, bicyclists and pedestrians to raise public awareness of their joint responsibilities when using City

transportation facilities. Encourage drivers' education in schools.

Strategy 1.5

Continue using the enforcement program employing selective enforcement of high collision locations and violations known to cause accidents.

Strategy 1.6

Improve communications among Engineering Services, Law Enforcement, and the courts in an effort to emphasize to the public the importance of traffic safety and compliance with traffic regulations.

Strategy 1.7

Continue the application of alternative designs such as roundabouts to improve the safety of existing high collision intersections and for planned high volume intersections.

7.8 TRANSPORTATION SYSTEM MANAGEMENT

Transportation System Management (TSM) is a means of reducing congestion, promoting traffic safety, and protecting the public investment in the existing street system. Techniques include:

- Traffic Management – improving vehicle movements and increasing the capacity and safety of existing streets by use of turn lanes, medians, bikeways, signal timing, synchronization, etc.
- Demand Management – reducing trips and/or the number of vehicles on the roadway, includes ride-sharing programs; expanded bicycle, pedestrian and transit options; High Occupancy Vehicle (HOV) lanes; preferential carpool parking; telecommuting and staggered or flexible working hours.
- Maintenance Management – managing maintenance necessary to protect the public investment in City streets, bikeways and sidewalks.

The primary objective of TSM is to “balance the overall circulation needs of the community with any resulting impacts on neighborhoods”.

7.8.1 Transportation System Management Goals and Strategies

Goal 1. Improve arterial vehicle efficiency by maximizing capacity and safety.

Strategy 1.1

Monitor and analyze traffic volumes and levels of service for major intersections as well as the links between major intersections.

Strategy 1.2

Continue to coordinate with Yavapai County, the Central Yavapai Metropolitan Planning Organization and the Arizona Department of Transportation in access management decisions on regional arterials.

Strategy 1.3

Perform a data analysis on the current travel habits of Prescott residents including the frequency, range, mode and duration of daily trips by dwelling unit types. Use the data to create a Prescott Transportation Plan to address

pedestrian and bicycle infrastructure, and to analyze potential impacts/benefits to the transportation network.

Strategy 1.4 Synchronize traffic signals to accommodate and enhance traffic flow.

Goal 2. Establish a program to ensure that the public investment in the existing transportation system is protected.

Strategy 1.1 Continue the existing pavement management system to provide data relative to the projected useful life of the pavement, alternatives for maintenance, maintenance schedules, a five-year priority program for maintenance, and the associated costs.

Strategy 1.2 Use the previously completed inventory and priority program for pavement of the unpaved streets and alleys, to recommend funding strategies.

Strategy 1.3 Continue using the comprehensive Maintenance Management System for traffic signing, striping and sweeping on city streets to meet identified levels of service.