

4 CIRCULATION

The Circulation Element of the 2030 General Plan is intended to provide guidance and specific actions to ensure the continued safe and efficient operation of Visalia's circulation system. The Element is based on a fundamental philosophy that traffic conditions in the City can be managed through a comprehensive program of transportation planning, land use planning, and growth management strategies. This Element includes provisions for roadways, transit, aviation, pedestrian, and bicycle transportation modes, as well as parking conditions.

The Circulation Element responds directly to the Government Code [Section 65302(b)], which requires "a circulation element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, any military airports and ports, and other local public utilities and facilities, all correlated with the land use element of the plan."

State Law recognizes that circulation and land use are closely related and requires that policies in this Element and the Land Use Element be linked. Careful integration of the City's traffic and circulation policies with its land use policies will ensure that there is sufficient roadway capacity to accommodate traffic generated by planned future development. The City is committed to designing a system of regional routes, local roads, public transit and bicycle and pedestrian pathways that will enhance the community and protect the environment.

The Land Use Element contains policies related to the physical framework for development that the circulation system is designed to serve all transportation users including vehicles, trucks, bicyclists and pedestrians. This Element also addresses landscaping along major streets and planning for street connectivity in new neighborhoods. It discusses how to create pedestrian-friendly environments and design for alternate modes of transportation. The Noise Element of the General Plan includes policies to alleviate noise generated by traffic conditions.

4.1 COMPLETE STREETS FRAMEWORK

In September 2008, the Governor signed into law the California Complete Streets Act, requiring General Plans to develop a plan for a multi-modal transportation system. The goal of the Act is to encourage cities to rethink policies that emphasize automobile circulation and prioritize motor vehicle improvements, and come up with creative solutions that emphasize all modes of transportation. Complete Streets design has many advantages. When people have more transportation options, there are fewer traffic jams and the overall capacity of the transportation network increases. Complete Street design attends to the needs of people who don't travel by automobile, who have often been overlooked. Additionally, increased transit ridership, walking, and biking can reduce air pollution, energy consumption, and greenhouse gas emissions, while improving the overall travel experience for road users.



The City is committed to designing a system of regional routes, local roads, public transit and bicycle and pedestrian pathways that will enhance the community and protect the environment.

To further the goal of optimizing travel by all modes, this General Plan incorporates the concept of “Complete Streets.” Complete Streets are designed and operated to enable safe, attractive, and comfortable access and travel for all users, including motorists, pedestrians, bicyclists, children, seniors, individuals with disabilities, and users of public transportation.

While there is no standard design template for a Complete Street, it generally includes one or more of the following features: bicycle lanes, wide shoulders, plenty of well-designed and well placed crosswalks, crossing islands in appropriate midblock locations, bus pullouts or special bus lanes, audible pedestrian signals, sidewalk bulb-outs, center medians, and street trees, planter strips and ground cover. Complete Streets create a sense of place and improve social interaction due to their emphasis on encouraging pedestrian activity.

4.2 GUIDING PRINCIPLES

Visalia’s Circulation Element relies upon three principles:

- Land use and the circulation system are interactive and interrelated;
- The City’s traffic circulation planning efforts are integrated with those of the County and Caltrans in a cooperative, regional planning effort; and
- State of the art transportation engineering is used, applying a Complete Streets framework, to bring planned improvements to reality considering the multi-modal, increased travel capacity and safety needs of the community.

Only through the development and implementation of all these principles can the City’s commitment to a balanced, efficient circulation system be achieved.

Connectivity

The major objective of the Circulation Element is to provide an interconnected street system with improved north-south and east-west connections for existing and future development in Visalia. The City’s original street layout provided street connections linking neighborhoods with work places, but as the community has grown, access has not always improved.

Traditional grid street designs allow for through movement and good connections between and within neighborhoods. Short blocks offer a choice of routes and enable more direct connections. Variations from the traditional grid can allow for diagonal and curvilinear streets as well as larger or smaller blocks for maximum flexibility and improved connectivity.

In order to ensure that street layout in future development incorporates the need for neighborhood connectivity and the comfort and safety of pedestrians and bicyclists, it is essential that:

- New development is connected to the surroundings with an increased number of access points and pedestrian and bicycle connections to the neighborhood network;
- Blocks are short to allow for more direct connections;
- Neighborhood streets are designed at a human-scale, without excessively wide streets; and

- Traffic controls are incorporated including speed limits, bulb outs, modern roundabouts, signage, and truck routes to restrict commercial traffic in neighborhoods.

The 2030 General Plan provides for new routes in partially developed portions of the Planning Area and expands the capacity and efficiency of the existing system. In addition, the Plan provides for narrower streets in some areas than might otherwise be designed based upon current traffic design standards and requirements alone.

Balanced Modes

Another objective is to create a balanced transportation system that serves public transit, bicyclists and pedestrians as well as private motor vehicles. Careful integration of land use and transportation and attention to the design and location of all roadway elements is essential to support pedestrian-oriented development and maintain the “small-town” atmosphere that Visalians desire. The 2030 General Plan includes new bikeways, trails and pedestrian facilities to link neighborhoods, schools, major recreation sites, and commercial centers including downtown. The Plan also fosters compact development, which can support additional public transit. By facilitating use of alternative modes of travel, Visalia will encourage physical activity, reduce auto-dependency, and lessen roadway congestion.

4.3 OVERALL CIRCULATION SYSTEM PLANNING

Roadway Network

In Visalia, the roadway system is based on a traditional grid pattern, on which all modes of transportation depend to some degree. This pattern has been modified in recent years to include some suburban curvilinear and cul-de-sac streets in several areas in the City. While State Routes 63, 99, 198 and 216 provide regional east/west and north/south access, these large arterials and freeways create lineal barriers to connectivity on smaller city streets.

Functional Street Classifications

Visalia’s roadway system is set up around a hierarchy of street types, which are commonly referred to as functional classifications. These functional classifications for most major streets are illustrated on **Figure 4-1** and summarized as follows:

Freeways

Freeways provide intra- and inter-regional mobility in Visalia. Freeway access is restricted to primary arterials via interchanges. State routes 99 and 198 are the only freeways within the Planning Area.

- *State Route 99* is a four- to six- lane divided freeway with a landscaped median. The northbound segment between Betty Drive in Goshen to Avenue 384 south of Kingsburg (Fresno County) contains three travel lanes; the remainder of State Route 99 in Tulare County contains two northbound and two southbound travel lanes. With approximately 55,000 daily trips near State Route 198, State Route 99 is the second most traveled roadway in the



Good roadway design is essential to support pedestrian-oriented development and maintain a “small-town” feel (top).

Visalia’s roadway system is set up around a hierarchy of street types, including arterials such as Ben Maddox Way (bottom).

county. In addition, it is estimated that nearly 25 percent of these trips are trucks.

- *State Route 198* is a major east-west corridor that begins at US 101, travels through the City of Visalia, and terminates at the Sequoia National Park entrance. This roadway has several sections that contain two and four lane roadways. In Visalia this roadway operates as a four lane freeway. State Route 198 will be improved to a four lane expressway between State Route 43 and State Route 99. State Route 198 serves a mix of residential, commercial, industrial and agricultural land uses. SR 198 between Ben Maddox and Mooney Boulevard is the County's most traveled roadway, with 58,000 daily trips in 2011.

Arterials

Arterials collect and distribute traffic from freeways and expressways to collector streets and vice versa. On arterials, the optimum distance between intersections is approximately one quarter mile. Driveways to major traffic generators may be permitted within the quarter-mile spacing. Other intersections closer than one quarter mile should be restricted to right turn access. Based upon the Visalia Improvement Standards (2008), the arterial right-of-way widths range from 84 feet to 110 feet. Arterials feature two to three through lanes of traffic in each direction with a left-turn channelization.

Collectors

Collectors connect local and arterial streets and provide direct access to parcels. At major intersections, driveways on collector streets should be no closer than 50 feet to the intersection per the City of Visalia

Improvement Standards. Non-residential driveways and/or intersecting streets on collector streets should be no closer than 300 to 400 feet apart.

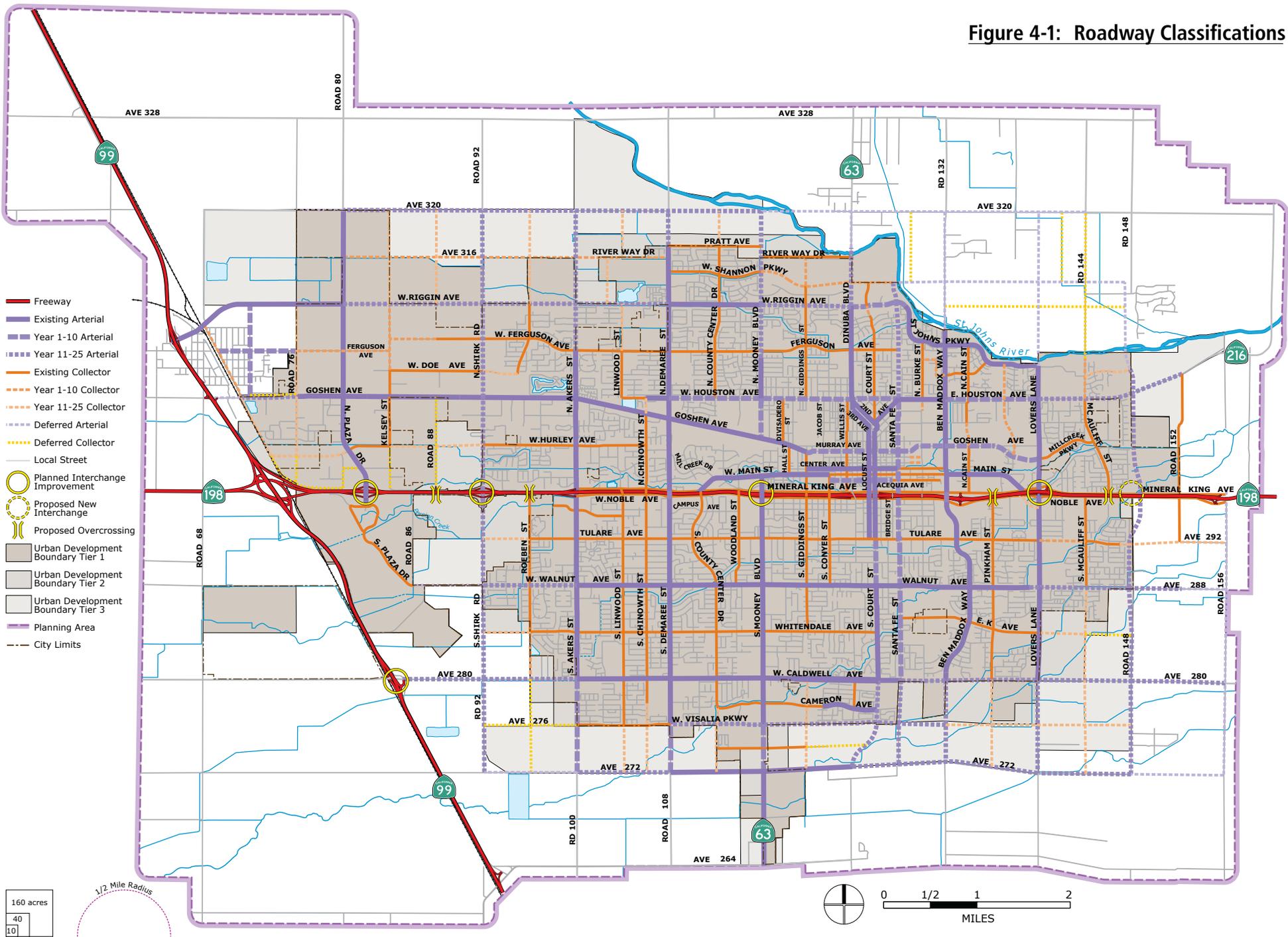
Major collectors carry four lanes of traffic within an 84-foot right-of-way and two bicycle lanes within an additional 10 feet of right-of-way. Collectors generally carry two lanes of traffic and are a minimum of 60 feet wide.

Local Streets

Local streets provide direct access to parcels. Local streets represent the largest part of the city's circulation system. Access to local streets is unrestricted and right-of-way widths vary between 48 and 66 feet depending on surrounding land uses (2008 City of Visalia Design and Improvement Standards). All roadways not identified in the General Plan as freeways, arterials, or collectors are designated local streets.

Although the City of Visalia Design Standards provide guidance on cross-section widths and the City has preserved right-of-way along street corridors for future transportation-related improvements, street designs may vary with regard to raised medians, travel lanes for vehicles, bicycle lanes, parking and sidewalks within these cross sections. Future roadways will be developed on a street by street basis according to direction from the City.

Figure 4-1: Roadway Classifications



Level of Service

To determine the operating conditions of a roadway segment or intersection, the concept of level of service (LOS) is commonly used. The LOS grading system is a scale ranging from LOS A to LOS F, with LOS A representing free-flow conditions and LOS F representing congested conditions. Table 4-1 provides more specific definitions.

Table 4-1: Intersection Level of Service Definitions

LOS	Description	Stopped Delay/Vehicle (sec)		
		Signalized	Unsignalized	All-Way Stop
A	Free Flow or Insignificant Delays: Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Control delay at signalized intersections is minimal.	< 10.0	< 10.0	< 10.0
B	Stable Operation or Minimal Delays: The ability to maneuver within the traffic stream is only slightly restricted, and control delay at signalized intersections are not significant.	>10 and < 20.0	>10 and < 15.0	>10 and < 15.0
C	Stable Operation or Acceptable Delays: The ability to maneuver and change lanes is somewhat restricted, and average travel speeds may be about 50 percent of the free flow speed.	>20 and < 35.0	>15 and < 25.0	>15 and < 25.0
D	Approaching Unstable or Tolerable Delays: Small increases in flow may cause substantial increases in delay and decreases in travel speed.	>35 and < 55.0	>25 and < 35.0	>25 and < 35.0
E	Unstable Operation or Significant Delays: Significant delays may occur and average travel speeds may be 33 percent or less of the free flow speed.	>55 and < 80.0	>35 and < 50.0	>35 and < 50.0
F	Forced Flow or Excessive Delays: Congestion, high delays, and extensive queuing occur at critical signalized intersections with urban street flow at extremely low speeds.	> 80.0	> 50.0	> 50.0

Source: Highway Capacity Manual, Transportation Research Board.

Existing conditions for roadway segment levels of service were estimated utilizing average daily traffic (ADT) and then evaluated based on LOS thresholds; see Table 4-2.

Table 4-2: Level of Service Criteria for Roadway Segments

Roadway Segment Type	Total Two-way Average Daily Traffic (ADT)				
	LOS A	LOS B	LOS C	LOS D	LOS E
6-Lane Divided Freeway	42,000	64,800	92,400	111,600	120,000
4-Lane Divided Freeway	28,000	43,200	61,600	74,400	80,000
6-Lane Freeway	36,900	61,100	85,300	103,600	115,300
4-Lane Freeway	23,800	39,600	55,200	67,100	74,600
6-lane Divided Expressway (with left-turn lanes)	35,500	42,200	46,200	55,800	60,000
6-Lane Divided Arterial (with left-turn lane)	32,000	38,000	43,000	49,000	54,000
4-Lane Divided Arterial (with left-turn lane)	22,000	25,000	29,000	32,500	36,000
4-Lane Undivided Arterial (no left-turn lane)	18,000	21,000	24,000	27,000	30,000
2-Lane Arterial (with left-turn lane)	11,000	12,500	14,500	16,000	18,000
2-Lane Arterial (no left-turn lane)	9,000	10,500	12,000	13,500	15,000
2-Lane Collector/Local Street	6,000	7,500	9,000	10,500	12,000

Note: All volumes are approximate and assume ideal roadway characteristics. Actual threshold volumes for each Level of Service listed above may vary depending on a variety of factors including curvature and grade, intersection or interchange spacing, driveway spacing, percentage of trucks and other heavy vehicles, travel lane widths, signal timing characteristics, on-street parking, volume of cross traffic and pedestrians, etc.

Source: Based on "Highway Capacity Manual," Transportation Research Board, 2000.



All of the intersections and roadway segments studied for the General Plan update currently have acceptable "level of service" traffic conditions, including South Mooney Boulevard (State Route 63).

Existing Traffic Conditions

The city's roadways were evaluated using average daily traffic (ADT) counts for the 2008 to 2010 period. Intersection facilities were evaluated for the AM and PM peak-hour using 2010 peak-hour turning movement counts. Traffic conditions and deficiencies were identified by calculating level of service (LOS).

LOS is a qualitative measure of traffic operating conditions, whereby a letter grade "A" through "F" is assigned to an intersection or roadway segment representing progressively worsening traffic conditions. LOS was calculated for different intersection control types using the methods documented in the Highway Capacity Manual 2000 (HCM 2000).

The previous General Plan established LOS "D" as the minimum acceptable LOS standard on city roadways. Although Caltrans has not designated a LOS standard, Caltrans' Guide for the Preparation of Traffic Impact Studies (December 2002) indicates that when the LOS of a State highway facility falls below the LOS "C/D" cusp in rural areas and the LOS "D/E" cusp in urban areas, additional traffic may have a significant impact.

Existing Intersection Level of Service

Existing weekday AM and PM peak-hour traffic volume counts were conducted at 25 intersections and 24-hour counts were conducted on roadway segments in April 2010 while school was in session. The AM peak hour is defined as one-hour of peak traffic flow counted between 7:00 AM and 9:00 AM and the PM peak hour is defined as one-hour of peak traffic flow counted between 4:00 PM and 6:00 PM. **Table 4-3** summarizes intersection LOS and seconds of delay for the AM and PM peak hours; **Table 4-4** summarizes roadway segment LOS in 2010 (the baseline year).

As **Table 4-3** shows, all of the 25 study intersections operate at acceptable LOS under existing conditions (2010 baseline).

Table 4-3: Existing Intersection LOS (2010)

No.	Intersection	Control Type	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Riggin Avenue/Shirk Road	AWSC	9.7	A	9.6	A
2	Riggin Avenue/Demaree Street	Signal	17.4	B	19.8	B
3	Riggin Avenue/Giddings Street	TWSC	14.6	B	16.6	C
4	Riggin Avenue/Dinuba Boulevard	Signal	17.3	B	27.5	C
5	Ferguson Avenue/Linwood Street	AWSC	10.7	B	9.0	A
6	Goshen Avenue/Plaza Drive	Signal	24.7	C	22.5	C
7	Houston Avenue/Demaree Street	Signal	23.4	C	19.8	B
8	Houston Avenue/Ben Maddox way	Signal	20.6	C	24.0	C
9	Houston Avenue/McAuliff Street	Signal	20.7	C	18.2	B
10	Hurley Street/Plaza Drive	Signal	6.8	A	8.9	A
11	Hillsdale Avenue/Akers Street	Signal	21.3	C	18.1	B
12	Mineral King Avenue/Akers Street	Signal	16.9	B	17.9	B
13	Noble Avenue/Akers Street	Signal	14.1	B	17.5	B
14	Cypress Avenue/Akers Street	Signal	17.6	B	34.3	C
15	Main Street/West Street	Signal	6.6	A	7.1	A
16	Noble Avenue/Watson Street	Signal	8.4	A	7.1	A
17	Tulare Avenue/Santa Fe Street	AWSC	13.4	B	14.3	B
18	Walnut Avenue/Shirk Road	AWSC	13.3	B	15.7	C
19	Whitendale Avenue/Demaree Street	Signal	8.4	A	8.9	A
20	Whitendale Avenue/Woodland Drive	TWSC	11.8	B	14.5	B
21	K Avenue/Ben Maddox Way	AWSC	9.5	A	13.5	B
22	K Avenue/Lovers Lane	OWSC	15.4	C	17.9	C
23	Caldwell Avenue/Burke Street	Signal	15.6	C	23.8	C
24	Caldwell Avenue/Lovers Lane	Signal	18.8	B	21.0	C
25	Visalia Road/Akers Street	TWSC	16.9	C	15.6	C

Legend:

TWSC = Two-Way-Stop Control; AWSC = All-Way-Stop Control; OWSC = One-Way-Stop Control

For Signalized Intersections Average Delay = Average Intersection Delay; For TWSC Intersections Average Delay = Worst-Case Intersection Movement Delay; For Signalized Intersections LOS = Average Intersection Level-of-Service; For TWSC Intersections LOS = Worst-Case Movement's Level-of-Service; Warrant = MUTCD Peak Hour Warrant 3

Source: *Omni-Means, 2014.*

Table 4-4 identifies existing roadway segment LOS for existing conditions (baseline 2010). Table 4-4 shows that all of the 33 roadway segments operate at acceptable LOS under existing conditions.

Table 4-4: Existing Roadway Segment LOS (2010)

<i>Roadway Segment</i>	<i>Limits</i>	<i>No. of Lanes</i>	<i>Facility Type</i>	<i>AADT</i>	<i>LOS</i>
Akers Street	Rialto – Caldwell Avenue	4	Arterial	7,100	B
Akers Street	Goshen Avenue – Ferguson Ave.	4	Arterial	10,400	B
Caldwell Avenue	Shirk Street - Aspen	2	Arterial	10,300	B
Caldwell Avenue	Ben Maddox Way – Pinkham Ave.	2	Arterial	13,500	B
Center Avenue	Floral Street – Court Street	2	Arterial	6,600	B
County Center	Beech Street – Walnut Avenue	2	Collector	10,478	C
Demaree Street	Damsen - Nicholas	4	Arterial	21,600	B
Demaree Street	Walnut Avenue – Tulare Avenue	4	Arterial	18,600	B
Goshen Avenue	Demaree Street – Chinowth Street	4	Arterial	18,800	B
Main Street	Floral Street – Court Street	2	Collector	7,100	C
Noble Avenue	Pinkham Street – Lovers Lane	2	Arterial	9,000	B
Riggin Avenue	Akers Street – Linwood Street	2	Arterial	7,800	C
Santa Fe Street	Center Avenue – School Street	2	Collector	2,600	B
Santa Fe Street	Walnut Avenue – Tulare Avenue	2	Collector	5,300	C
Shirk Avenue	Goshen Avenue – Doe Avenue	2	Arterial	7,600	C
Shirk Avenue	Walnut Avenue – State Route 198	2	Arterial	6,800	C
Walnut Avenue	Atwood – Linwood Street	4	Arterial	11,600	B
Walnut Avenue	Conyer Street – Court Street	4	Arterial	15,200	B
Walnut Avenue	Yale – Mall Entrance	4	Arterial	15,100	B
Whitendale Avenue	Crenshaw – Linwood Street	2	Collector	7,300	C
Whitendale Avenue	West Street – Court Street	2	Collector	6,100	C
State Route 63	Caldwell Avenue – Walnut Avenue	6	State Route	33,000	B
State Route 63	Walnut Avenue – Tulare Avenue	6	State Route	31,000	B
State Route 63	School Avenue – Murray Avenue	4	State Route	11,700	B
State Route 99	Caldwell Avenue – State Route 198	4	State Route	55,000	B

Table 4-4: Existing Roadway Segment LOS (2010)

<i>Roadway Segment</i>	<i>Limits</i>	<i>No. of Lanes</i>	<i>Facility Type</i>	<i>AADT</i>	<i>LOS</i>
State Route 99	State Route 198 – Avenue 304	4	State Route	49,500	B
State Route 99	Avenue 304 – Betty Drive	4	State Route	49,000	B
State Route 198	State Route – Akers Street	4	State Route	50,000	C
State Route 198	Akers Street - Mooney Boulevard	4	State Route	59,000	D
State Route 198	Mooney Boulevard – Lovers Lane	4	State Route	61,000	D
State Route 198	Lovers Lane – Road 156	4	State Route	29,000	B
State Route 216	Mill Creek Parkway – Douglas Ave.	4	State Route	19,200	B
State Route 216	Lovers Lane – McAuliff Street	2	State Route	9,200	C

Source: *Omni-Means, 2010*

Objectives

- T-0-1** Develop and maintain a road system that is convenient, safe, efficient, and cost effective.
- T-0-2** Maximize the use and efficiency of the existing transportation system through application of Transportation System Management (TSM) strategies.
- T-0-3** Promote ways to reduce the number of peak hour trips and vehicle-miles traveled in the Planning Area.
- T-0-4** Ensure that new development pays its fair share of the costs of new and improved transportation facilities.

Policies

System Planning

- T-P-1** Provide transportation facilities based on a “Complete Streets” concept that facilitate the balanced use of all travel modes (pedestrians, bicyclists, motorists, and transit users), meeting the transportation needs of all ages and abilities and providing mobility for a variety of trip purposes.
- T-P-2** Optimize roadway operations with priority given to signal timing coordination in order to increase traffic-carrying capacity and decrease air pollution and congestion. Roundabouts shall be considered when feasible and beneficial as an alternative to traffic signals.



The Plan directs the City to design and build future roadways following the Circulation Diagram, including new streets and improvements to existing streets (top). Street design standards are to be updated to follow the “Complete Streets” concept (bottom).

T-P-3 Design and build future roadways that complement and enhance the existing network, as shown on the Circulation Diagram, to ensure that each new and existing roadway continues to function as intended.

T-P-4 Where feasible, space traffic signals no closer than one-quarter mile along two-way arterials except in unusual circumstances. The intersections of arterial and collector streets and access driveways to major traffic generators that are signalized shall be located so as to maintain this spacing.

T-P-5 Take advantage of opportunities to consolidate driveways, access points, and curb cuts along existing arterials when a change in development or a change in intensity occurs or when traffic operation or safety warrants.

T-P-6 Establish priorities for improvements based on the functional classifications identified for street segments on the Circulation System Map and on the relative importance of the roadway for each travel mode.

For example, transit stops and bus turnouts may have higher priority than improvements for through traffic on important transit corridors; through traffic may have higher priority than on-street parking on major arterials; and pedestrian and bicycle movement may have high priority in areas with high pedestrian interest and activity (such as Downtown).

T-P-7 Continue to implement a monitoring and evaluation program that will provide the data

and planning needed to develop an effective and coordinated Capital Improvement Program (CIP) that will provide circulation improvements in concert with development trends.

T-P-8 Give priority to funding and implementing projects that either complete links on the transportation system or relieve existing deficiencies.

Level of Service Standards; Engineering and Safety Standards

T-P-9 Maintain acceptable levels of service for all modes and facilities, as established in Tables 4-1, Intersection Level of Service Definitions and 4-2, Level of Service Criteria for Roadway Segments.

T-P-10 Manage local residential streets to limit average daily vehicle volumes to 1,500 or less and maintain average vehicle speeds between 15 and 25 miles per hour.

T-P-11 Update the City of Visalia Engineering and Street Design Standards to ensure that roadway and streetscape design specifications are in accordance with the Complete Streets concept and other policies in this General Plan.

Updated design standards must allow flexibility to accommodate retrofitting streets with limited right-of-way. In order to accommodate all travel modes, adjustments may be made to median, travel lane, and bike lane widths; alternate

bikeway routes on parallel facilities may also be considered.

- T-P-12** Require or provide adequate traffic safety measures on all new and existing roadways.

These measures may include, but shall not be limited to: appropriate levels of maintenance, proper street design, traffic control devices, street lights, and coordination with school districts to provided school crossing signs and protection.

Right of Way Acquisition and Construction

- T-P-13** Where possible, acquire right-of-way within older areas of the city to improve the connectivity of the roadway system, consistent with Figure 4-1. The benefits of improved traffic flow shall be weighed against the adverse impacts of street widening on the neighborhoods and adjacent land uses.
- T-P-14** Require residential communities on undeveloped land planned for urban uses to provide stubs for future connections to the edge of the property line. Where stubs exist on adjacent properties, new streets within the development should connect to them.
- T-P-15** Require additional right-of-way and improvements of Circulation Element facilities where needed for turning movements or to provide access to adjacent properties wherever access is not feasible from the lower classification street system.
- T-P-16** Promote phased construction of major arterials where sufficient right-of-way width is

obtained for ultimate future needs, but street construction width is adequate to meet present need, thereby avoiding maintenance costs resulting from unused pavement.

- T-P-17** Use citywide traffic impact fees to provide additional funding for transportation improvements with citywide benefits, such as highway interchanges and ramps. Provide for automatic annual adjustments in traffic fees to reflect increases in construction costs (materials, inflation, etc.).

Traffic Studies and Mitigation Measures

- T-P-18** To ensure that citywide traffic service levels are maintained, require a traffic study, as a condition of development, of surrounding arterials, collectors, access roads, and regionally significant roadways for any major project that would require a General Plan amendment, and for projects where the proposed use could create traffic congestion because needed improvements identified by this General Plan would not be completed before project occupancy or are not funded under the CIP.

The City will update its criteria and guidelines for traffic studies to be consistent with the General Plan, and projects that conform to General Plan-specified land use designations and intensities will generally not be required to prepare a traffic study.

- T-P-19** Pursue Transportation System Management (TSM) for the mitigation of traffic and parking congestion.

Public transit, traffic management, ride sharing, and parking management can be used to implement TSM strategies.

- T-P-20** Work with major employers and the Tulare County Association of Governments (TCAG) to reduce total vehicle miles traveled and the total number of daily and peak hour vehicle trips and provide better utilization of the transportation system through development and implementation of Transportation Demand Management (TDM) strategies that are tailored to the needs of geographic areas within the city and the time period of traffic congestion.

These may include the implementation staggered work hours, utilization of telecommunications, increased use of ridesharing in the public and private sectors, and provision for bicyclists.

Coordination with the College of the Sequoias

- T-P-21** Coordinate with the College of the Sequoias to develop a transportation plan that ensures that the College provides adequate parking areas for students and faculty; improves circulation issues on and adjacent to campus; integrates transit; and incorporates Transportation Demand Management (TDM) strategies such as incentives for ridesharing and facilities for bicyclists.

The plan should minimize negative impacts on surrounding residential areas and on the transportation system.

4.4 PLANNED IMPROVEMENTS

To achieve a balance between existing and future land uses and the carrying capacity of transportation corridors, improvements to the roadway network will be needed. The future Circulation Diagram is illustrated in **Figure 4-1**. Major street improvements consistent with the Circulation Diagram planned for Visalia are listed in **Table 4-5**. These improvements include widening portions of State Route 198 and other major arterials, new bridge crossings, interchange improvements and grade separations. Several new arterial roads will need to be constructed as well as numerous collector and residential streets in the targeted growth areas. The proposed roads are conceptual, subject to further engineering and environmental review. Interchange improvements may be done in coordination with Caltrans and other jurisdictions.

Table 4-5 shows planned improvements where engineering details are known; additional improvements, shown on **Figure 4-1**, will also be needed to accommodate future traffic and ensure a complete street system correlated with future land use. Details on these planned improvements will be defined as the City moves forward with long-range capital improvement programming.

Table 4-5: Planned Circulation System Improvements

<i>Facility</i>	<i>Project Scope</i>	<i>Length</i>	<i>Type of Improvement</i>
NEW ROADWAY CONSTRUCTION PROJECTS			
Avenue 272	Construct new roadway	Rd 122 to Santa Fe; 0.8 mi.	New 2-lane; 1/2 arterial
Avenue 320	Construct new roadway	Demaree to Mooney; 1 mi.	New 2-lane; 1/2 arterial
Mooney Boulevard	Construct new roadway	Riggin to Avenue 320; 1 mi.	New 2-lane; arterial
Court Street	Construct new roadway	Wren to Riggin; 0.2 mi.	New 2-lane; collector
Tulare Avenue	Construct new roadway	Lovers Lane to McAuliff; 0.5 mi.	New 2-lane; collector
Cain Street	Construct new roadway	Goshen to Douglas; 0.2 mi.	New 2-lane; collector
Kelsey Street	Construct new roadway	Doe to Riggin; 0.7 mi.	New 2-lane; collector
Sunnyview Avenue	Construct new roadway	Kelsey to Clancy; 0.5 mi.	New 2-lane; collector
Virmargo Street	Construct new roadway	Goshen to Houston; 0.5 mi.	New 2-lane; collector
Chinowth Street	Construct new roadway	Avenue 272 to Caldwell; 1 mi.	New 2-lane; collector
Chinowth Street	Construct new roadway	Goshen to Houston; 0.2 mi.	New 2-lane; collector
Court Street	Construct new roadway	Avenue 272 to Ave 276; 0.5 mi.	New 2-lane; collector
Linwood Street	Construct new roadway	Avenue 272 to Ave 276; 0.5 mi.	New 2-lane; collector
Linwood Street	Construct new roadway	Riggin to Avenue 320; 1 mi.	New 2-lane; collector
Pinkham Street	Construct new roadway	Avenue 272 to Caldwell; 0.9 mi.	New 2-lane; collector
Roeben Street	Construct new roadway	Caldwell to Whitendale; 0.5 mi.	New 2-lane; collector
Tulare Avenue	Construct new roadway	Shirk to Roeben; 0.5 mi.	New 2-lane; collector
Avenue 276 (Visalia Pkwy)	Construct new roadway	Ben Maddox to Rd 148; 2 mi.	New 2-lane; collector
Avenue 308 (Ferguson)	Construct new roadway	American (Rd 76) to Plaza; 0.5 mi.	New 2-lane; collector
Avenue 316	Construct new roadway	Plaza to Chinowth; 3.2 mi.	New 2-lane; collector
County Center Drive	Construct new roadway	Avenue 272 to Packwood Creek; 0.7 mi.	New 2-lane; collector
County Center Drive	Construct new roadway	Pratt to Avenue 320; 0.5 mi.	New 2-lane; collector
Giddings Street	Construct new roadway	Shannon Pkwy to Avenue 316; 0.3 mi.	New 2-lane; collector
Hurley Avenue	Construct new roadway	Camp to American (Rd 76); 0.3 mi.	New 2-lane; collector
Hurley Avenue	Construct new roadway	Kelsey to Shirk; 1 mi.	New 2-lane; collector
Hurley Avenue	Construct new roadway	Road 76 to Plaza; 0.5 mi.	New 2-lane; collector
"K" Avenue	Construct new roadway	Lovers Lane to McAuliff; 0.5 mi.	New 2-lane; collector
Kelsey Street	Construct new roadway	Riggin to Avenue 320; 1 mi.	New 2-lane; collector

Table 4-5: Planned Circulation System Improvements

<i>Facility</i>	<i>Project Scope</i>	<i>Length</i>	<i>Type of Improvement</i>
McAuliff Street	Construct new roadway	Avenue 272 to Caldwell; 1 mi.	New 2-lane; collector
McAuliff Street	Construct new roadway	Walnut to Caldwell; 1 mi.	New 2-lane; collector
Road 76 (American)	Construct new roadway	Ferguson (Ave 308) to Riggin; 0.5 mi.	New 2-lane; collector
Road 76 (American)	Construct new roadway	Hurley to Legacy; 0.2 mi.	New 2-lane; collector
Road 88	Construct new roadway	Riggin to Avenue 320; 1 mi.	New 2-lane; collector
Road 96 (Roeben St)	Construct new roadway	Riggin to Avenue 320; 1.4 mi.	New 2-lane; collector
Tulare Avenue	Construct new roadway	Rd 148 to Rd 152; 0.6 mi.	New 2-lane; collector
Doe Avenue	Construct new roadway	Shirk to Roeben; 0.5 mi.	New 2-lane; collector
Shannon Parkway	Construct new roadway	Dinuba Blvd. (SR 63) to Santa Fe; 0.5 mi.	New 2-lane; collector
St John's Parkway	Construct new roadway	McAuliff to Rd 148; 0.5 mi.	New 2-lane; collector
Virmargo Street	Construct new roadway	Houston to St. John's Parkway; 0.4 mi.	New 2-lane; collector
Whitendale Avenue	Construct new roadway	Shirk to Roeben; 0.5 mi.	New 2-lane; collector
Burke Street	Construct new roadway	Roosevelt to Houston; 0.3 mi.	New 2-lane; collector
Oak Ave	Construct new roadway	Tipton to Burke; 0.2 mi	New 2-lane; local
School Ave	Construct new roadway	Tipton to Burke; 0.2 mi	New 2-lane; local
Avenue 276 (Visalia Pkwy)	Construct new roadway	Demaree to Ben Maddox; 3 mi.	New 4-lane; Arterial
Ben Maddox Way	Construct new roadway	Avenue 272 to Caldwell; 0.9 mi.	New 4-lane; arterial
Road 148	Construct new roadway	Houston (SR 216) to St. John's Pkwy; 0.2 mi.	New 4-lane; Arterial
Road 148	Construct new roadway	Mineral King to Houston; 1.1 mi.	New 4-lane; Arterial
Road 148	Construct new roadway	Walnut to Noble; 0.9 mi.	New 4-lane; Arterial
Santa Fe Street	Construct new roadway	Riggin/St John's Parkway to Shannon Parkway; 0.3 mi.	New 4-lane; arterial
Stonebrook Street	Construct new roadway	Avenue 272 to Caldwell; 1 mi.	New 4-lane; collector

Table 4-5: Planned Circulation System Improvements

<i>Facility</i>	<i>Project Scope</i>	<i>Length</i>	<i>Type of Improvement</i>
EXISTING ROADWAY WIDENING PROJECTS			
Houston Ave.	Widen existing roadway	Ben Maddox to Lovers Lane; 1 mi.	Widen from 2 to 4 lanes
Houston Ave.	Widen existing roadway	Santa Fe to Ben Maddox; .5 mi.	Widen from 2 to 4 lanes
Murray Ave.	Widen existing roadway	Giddings to Santa Fe; 1 mi.	Widen from 2 to 4 lanes
Santa Fe St.	Widen existing roadway	K St to Tulare; .9 mi.	Widen from 2 to 4 lanes
Santa Fe St.	Widen existing roadway	Tulare to Houston; 1.5 mi.	Widen from 2 to 4 lanes
Walnut Ave.	Widen existing roadway	Yale to Central; .2 mi.	Widen from 2 to 4 lanes
Akers Street	Widen existing roadway	Ferguson to Riffin; 0.5 mi.	Widen from 2 to 4 lanes
Court St.	Widen existing roadway	Walnut to Tulare; .4 mi.	Widen from 2 to 4 lanes
Ferguson Ave.	Widen existing roadway	Plaza to Kelsey; .5 mi.	Widen from 2 to 4 lanes
Goshen Avenue	Widen existing roadway	Santa Fe to Lovers Lane; 1.6 mi.	Widen from 2 to 4 lanes
McAuliff Street	Widen existing roadway	Mineral King to Mill Creek Pkwy; 0.6 mi.	Widen from 2 to 4 lanes
Santa Fe Street	Widen existing roadway	Caldwell to "K"; 0.7 mi.	Widen from 2 to 4 lanes
Whitendale Avenue	Widen existing roadway	Sallee to Fairway; 0.4 mi.	Widen from 2 to 4 lanes
Santa Fe St.	Widen existing roadway	Caldwell to Ave. 272; 1 mi.	Widen from 2 to 4 lanes
Santa Fe Street	Widen existing roadway	Houston to Riffin; 1 mi.	Widen from 2 to 4 lanes
Shirk Road	Widen existing roadway	Caldwell to SR198; 4 mi.	Widen from 2 to 4 lanes
Shirk Road	Widen existing roadway	SR198 to Goshen Ave; 1 mi.	Widen from 2 to 4 lanes
Walnut Avenue	Widen existing roadway	Cedar to Rd 148; 1.2 mi.	Widen from 2 to 4 lanes
Akers Street	Widen existing roadway	Avenue 276 to Avenue 272; 0.5 mi.	Widen from 2 to 4 lanes
Akers Road	Widen existing roadway	Caldwell to Visalia Pkwy (Ave. 276); .5 mi.	Widen from 2 to 4 lanes
Demaree St.	Widen existing roadway	Pratt to Ave 320; 0.5 mi.	Widen from 2 to 4 lanes
Goshen Ave.	Widen existing roadway	Camp to American (Rd 76); 0.6 mi.	Widen from 2 to 4 lanes
Hwy 63 (Dinuba Blvd)	Widen existing roadway	Riffin to St John's River; 0.6 mi.	Widen from 2 to 4 lanes
Road 148	Widen existing roadway	Ave 272 to Ave 276; 0.5 mi.	Widen from 2 to 4 lanes
Road 148	Widen existing roadway	Ave 276 to Walnut; 1.5 mi.	Widen from 2 to 4 lanes
Shirk Street	Widen existing roadway	Goshen to Riffin; 1 mi.	Widen from 2 to 4 lanes
Walnut Avenue	Widen existing roadway	Shirk to Akers; 1 mi.	Widen from 2 to 4 lanes

Table 4-5: Planned Circulation System Improvements

<i>Facility</i>	<i>Project Scope</i>	<i>Length</i>	<i>Type of Improvement</i>
Walnut Avenue	Widen existing roadway	Rd 148 to Rd 152; 0.5 mi.	Widen from 2 to 4 lanes
Lovers Lane	Widen existing roadway	Ave 272 to Caldwell; 1 mi.	Widen from 2 to 4 lanes
Riggin Avenue	Widen existing roadway	Road 80 to SR 63	Widen from 2 to 4 lanes
Caldwell Avenue	Widen existing roadway	Akers St to Linwood Ave; 0.5 mi.	Widen from 2 to 4 lanes
Plaza Drive	Widen existing roadway	Crowley to Avenue 304 (Goshen)	Widen from 2 to lanes
Mooney Boulevard (SR 63)	Widen existing roadway	Avenue 272 to Avenue 276; 0.5 mi.	Widen from 4 to 6 lanes
BRIDGE STRUCTURE PROJECTS			
Preston Street	New bridge	Preston St at Mill Creek Ditch	New 2-lane bridge; local
McAuliff Street	New over crossing	McAuliff St/SR 198	New bridge structure
Ben Maddox Way	Widen over crossing	Ben Maddox Way/SR 198	Widen bridge structure
TRAFFIC SIGNAL IMPROVEMENT PROJECTS			
Acequia Ave at Bridge St	Not applicable	Not applicable	New Traffic Signal
Acequia Ave at Burke St	Not applicable	Not applicable	New Traffic Signal
Acequia Ave at Santa Fe St	Not applicable	Not applicable	New Traffic Signal
Akers St at Ferguson Ave	Not applicable	Not applicable	New Traffic Signal
Akers St at Riggin Ave	Not applicable	Not applicable	New Traffic Signal
Akers St at Visalia Parkway	Not applicable	Not applicable	New Traffic Signal
Beech Ave at Court St	Not applicable	Not applicable	New Traffic Signal
Ben Maddox Way at Douglas Ave	Not applicable	Not applicable	New Traffic Signal
Ben Maddox Way at K Ave	Not applicable	Not applicable	New Traffic Signal
Bridge St at Center Ave	Not applicable	Not applicable	New Traffic Signal
Bridge St at Main St	Not applicable	Not applicable	New Traffic Signal
Bridge St at Murray Ave	Not applicable	Not applicable	New Traffic Signal
Bridge St at Tulare Ave	Not applicable	Not applicable	New Traffic Signal
Burke St at Center Ave	Not applicable	Not applicable	New Traffic Signal
Burke St at Goshen Ave	Not applicable	Not applicable	New Traffic Signal
Burke St at Main St	Not applicable	Not applicable	New Traffic Signal
Burke St at St John's Pkwy	Not applicable	Not applicable	New Traffic Signal

Table 4-5: Planned Circulation System Improvements

<i>Facility</i>	<i>Project Scope</i>	<i>Length</i>	<i>Type of Improvement</i>
Burke St at Tulare Ave	Not applicable	Not applicable	New Traffic Signal
Burrel Ave at Mooney Blvd	Not applicable	Not applicable	New Traffic Signal
Cain St at Main St	Not applicable	Not applicable	New Traffic Signal
Cain St at Mineral King Ave	Not applicable	Not applicable	New Traffic Signal
Cameron Ave at County Center	Not applicable	Not applicable	New Traffic Signal
Cameron Ave at Court St	Not applicable	Not applicable	New Traffic Signal
Campus Ave at County Center	Not applicable	Not applicable	New Traffic Signal
Center Ave at Conyer St	Not applicable	Not applicable	New Traffic Signal
Center Ave at SantavFe St	Not applicable	Not applicable	New Traffic Signal
Central St at Tulare Ave	Not applicable	Not applicable	New Traffic Signal
Chinowth St at Goshen Ave	Not applicable	Not applicable	New Traffic Signal
College Ave at Lovers Lane	Not applicable	Not applicable	New Traffic Signal
County Center at Ferguson Ave	Not applicable	Not applicable	New Traffic Signal
County Center at Houston Ave	Not applicable	Not applicable	New Traffic Signal
County Center at Packwood Ave	Not applicable	Not applicable	New Traffic Signal
County Center at Riggins Ave	Not applicable	Not applicable	New Traffic Signal
County Center at Royal Oaks Ave	Not applicable	Not applicable	New Traffic Signal
Court St at Ferguson Ave	Not applicable	Not applicable	New Traffic Signal
Court St at Granite/Pearl St	Not applicable	Not applicable	New Traffic Signal
Court St at Paradise Ave	Not applicable	Not applicable	New Traffic Signal
Court St at Whitendale Ave	Not applicable	Not applicable	New Traffic Signal
Crenshaw St at Whitendale Ave	Not applicable	Not applicable	New Traffic Signal
Cypress Ave at Linwood St	Not applicable	Not applicable	New Traffic Signal
Damsen Ave at Demaree St	Not applicable	Not applicable	New Traffic Signal

Table 4-5: Planned Circulation System Improvements

<i>Facility</i>	<i>Project Scope</i>	<i>Length</i>	<i>Type of Improvement</i>
Demaree St at Ferguson Ave	Not applicable	Not applicable	New Traffic Signal
Demaree St at Mill Creek Pkwy	Not applicable	Not applicable	New Traffic Signal
Divisadero St at Walnut Ave	Not applicable	Not applicable	New Traffic Signal
Divisadero St at Whitendale Ave	Not applicable	Not applicable	New Traffic Signal
Doe Ave at Shirk St	Not applicable	Not applicable	New Traffic Signal
Encina St at Walnut Ave	Not applicable	Not applicable	New Traffic Signal
Ferguson Ave at Linwood St	Not applicable	Not applicable	New Traffic Signal
Ferguson Ave at Mooney Blvd	Not applicable	Not applicable	New Traffic Signal
Giddings St at Prospect Ave	Not applicable	Not applicable	New Traffic Signal
Giddings St at Riggin Ave	Not applicable	Not applicable	New Traffic Signal
Goshen Ave at Mooney Blvd	Not applicable	Not applicable	New Traffic Signal
Grape St at NE 3rd	Not applicable	Not applicable	New Traffic Signal
Houston Ave at Jacob St	Not applicable	Not applicable	New Traffic Signal
Houston Ave at Mooney Blvd	Not applicable	Not applicable	New Traffic Signal
Houston Ave at Rinaldi St	Not applicable	Not applicable	New Traffic Signal
Hurley Ave at Shirk St	Not applicable	Not applicable	New Traffic Signal
Jacob St at Main St.	Not applicable	Not applicable	New Traffic Signal
K Ave at Pinkham St	Not applicable	Not applicable	New Traffic Signal
Lovers Lane at Tulare Ave	Not applicable	Not applicable	New Traffic Signal
Main St at Mineral King Ave	Not applicable	Not applicable	New Traffic Signal
McAuliff St at Noble Ave	Not applicable	Not applicable	New Traffic Signal
McAuliff St at Walnut Ave	Not applicable	Not applicable	New Traffic Signal
Murray Ave at Santa Fe St	Not applicable	Not applicable	New Traffic Signal

Table 4-5: Planned Circulation System Improvements

<i>Facility</i>	<i>Project Scope</i>	<i>Length</i>	<i>Type of Improvement</i>
Noble Ave at Pinkham St	Not applicable	Not applicable	New Traffic Signal
Riggin Ave at Shirk Rd	Not applicable	Not applicable	New Traffic Signal
Roeben St at Tulare Ave	Not applicable	Not applicable	New Traffic Signal
Roeben St at Walnut Ave	Not applicable	Not applicable	New Traffic Signal
Santa Fe St at Tulare Ave	Not applicable	Not applicable	New Traffic Signal
Santa Fe St at Walnut Ave	Not applicable	Not applicable	New Traffic Signal
Shirk St at Walnut Ave	Not applicable	Not applicable	New Traffic Signal
Visalia Mall entrance at Walnut Ave	Not applicable	Not applicable	New Traffic Signal
West St at Whitendale Ave	Not applicable	Not applicable	New Traffic Signal
Whitendale Ave at Woodland Dr	Not applicable	Not applicable	New Traffic Signal
Traffic signal interconnection	Connecting existing traffic signals	1.0 mile	Signal interconnect

Source: *Omni Means, 2014 & Tulare County Regional Transportation Plan, 2011.*

Table 4-6: Typical Street Elements and Widths (Feet)

Street Classification	Right-of-Way Width	Curb-to-Curb Width	Travel Lanes	Parking Lanes	Bicycle Lanes	Median Strip	Planter Strip ¹	Sidewalk
6-Lane Arterial	134'	110'	6 x 12'	None	2 x 6'	26'	5'	7'
4-Lane Arterial	110'	86'	4 x 12'	None	2 x 6'	26'	5'	7'
2-Lane Arterial	74'	50'	2 x 12'	None	2 x 6'	14'	5'	7'
4-Lane Collector	110'	86'	4 x 12'	2 x 8'	2 x 5'	12'	5'	7'
2-Lane Collector	84'	62'	2 x 12'	2 x 8'	2 x 5'	12'	5'	6'
2-Lane Local	60'	40'	2 x 12'	2 x 8'	None	None	5'	5'

1. Minimum planter strip width stated in the table includes the width of the curb.

Source: Dyett and Bhatia, 2010; Omni-Means, 2012.

Street Standards

Typical street widths and design elements in Visalia are listed in **Table 4-6**. All street designs are subject to review and approval by the Public Works Department and additional local street cross-sections may be approved with area plans, development projects or subdivisions to reflect specific design concepts. Although the City of Visalia Design Standards provide guidance on cross-section widths and the City has preserved right-of-way along street corridors for future transportation-related improvements, street designs may vary with regard to raised medians, travel lanes for vehicles, bicycle lanes, parking and sidewalks within these cross sections. Future roadways will be developed on a street by street basis according to direction from the City.

Streetscape Improvements

Complementing improvements to the citywide street system are improvements to the city's streetscape and city identity. These streetscape types create a hierarchy for navigation throughout the city, and provide opportunities for public art, signage, and special landscaping and fixtures. The General Plan introduces four streetscape concepts, shown on the illustrative street sections that follow.

Figure 4-2a shows a "green street" version of a two-lane collector. Green Streets are more intimate in scale and provide greater pedestrian facilities like wide sidewalks, furnishings, curb bulb-outs, and frequent, well-marked crosswalks. This design may be appropriate for streets like Main Street, Murray Avenue, Court Street/Dinuba Boulevard, and Santa Fe Street. The shared travel/bike lane is a departure from the typical street section for a two-lane collector.

Figure 4-2b shows a “green corridor” that supports multimodal circulation, where pedestrians, bicyclists, and vehicles share the right-of-way. Street trees and lighting play an important role on these streets in providing a consistent landscape scheme and shading. Typically, street parking would be provided on a collector but not on an arterial. Arterial versions of green corridors may include major east-west and north-south connections like Goshen Avenue, Walnut Avenue, and Demaree Street. **Figure 4-2c** shows a green corridor in a Downtown context where right-of-way may be more limited and buildings are built to the street edge.

Figure 4-2d shows an arterial that accommodates transit in its own lane, and supports a pedestrian-realm that complements transit. The “transit corridor” may be considered a type of four-lane arterial. This design could be appropriate along the route of a future light rail or bus rapid transit line on Goshen Avenue, South Mooney Boulevard, Main Street or Murray Avenue.

“Gateway boulevards,” as shown in **Figure 4-2e**, provide a sense of identity and entrance into the city. Double rows of trees, enhanced plantings, and lighting elements are the primary components of the streetscape design. Gateway boulevards may be an appropriate design for six-lane arterials that could include Shirk Road, Riggins Avenue, Lovers Lane, and Caldwell Avenue.

Figure 4-2a: Green Street (2-Lane Collector)

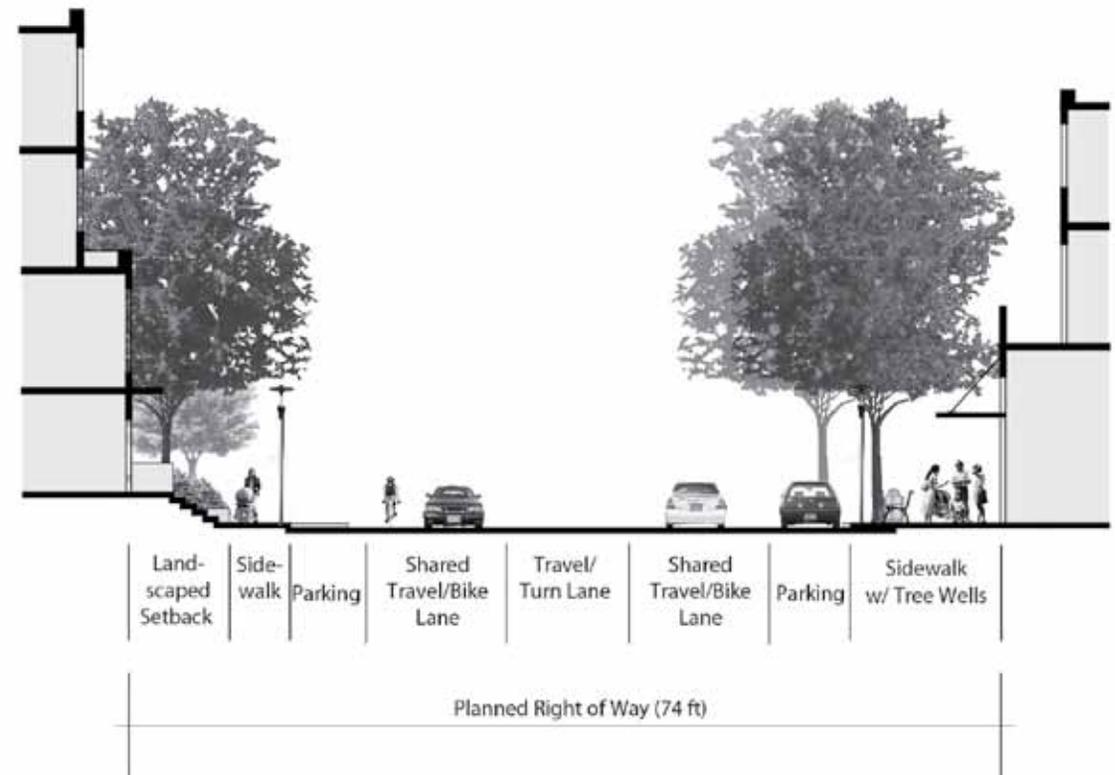


Figure 4-2b: Green Corridor (4-Lane Collector)

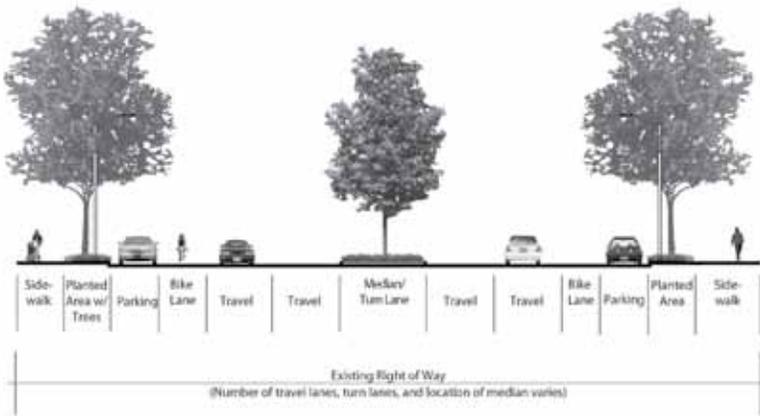


Figure 4-2d: Transit Corridor (4-Lane Arterial, with Transit)

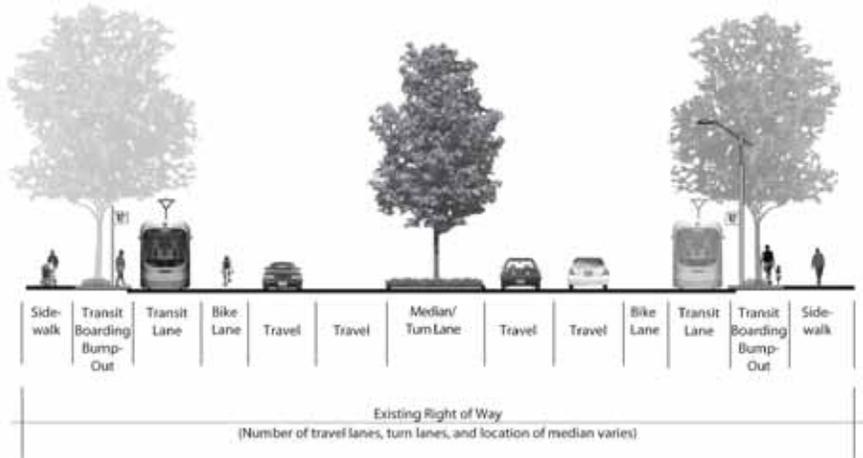


Figure 4-2c: Green Corridor - Downtown (4-Lane Collector)

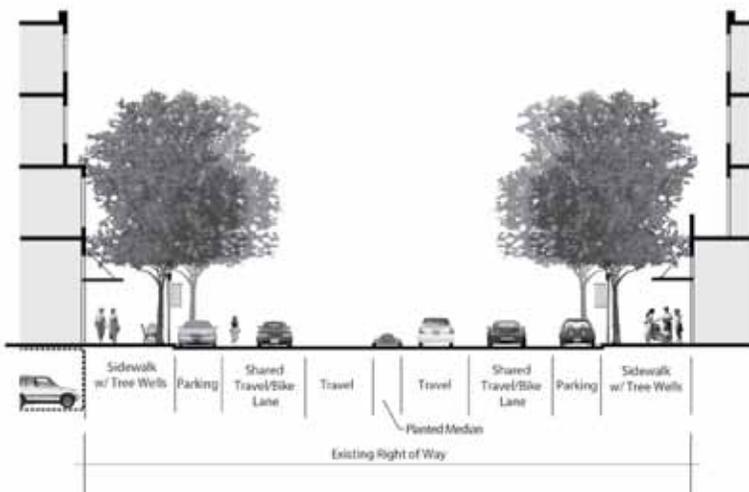
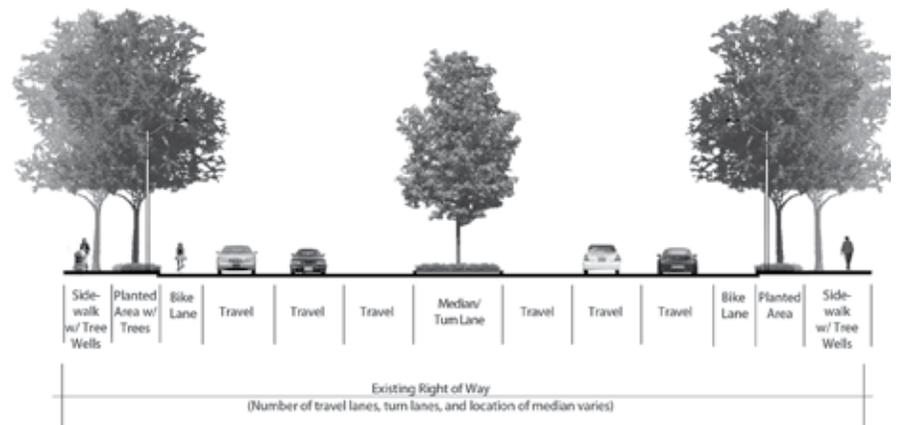


Figure 4-2e: Gateway Boulevard (6-Lane Arterial)



Future Traffic Conditions

The TCAG Regional Travel Demand Forecast Model (RTDFM) was used to identify future traffic volumes along local, collector, and arterial roads and freeways. The model treats these as a system of links, or streets, that connect future land uses—i.e., residential and non-residential uses—based on each city’s and the county’s general plan. Tulare Council of Governments (TCAG) provided the transportation model forecasts for land use and circulation.

Table 4-7 identifies 2030 forecasted AM and PM peak hour traffic LOS. As shown in **Table 4-7**, all of the study intersections are projected to operate at acceptable LOS with planned improvements, including traffic signalization and lane modifications that will be required during the life of the General Plan.¹ The lane geometry and signal control of each study intersection is shown in **Figure 4-2**.

¹ Mitigation measures for these impacts will be evaluated in the Draft EIR. These may include signalization and intersection improvements as well as shifting traffic to alternate routes and an expanded grid—options that the TCAG model cannot evaluate because they are fine-grained, but can be studied with “post-processing” analysis techniques.

Table 4-7: Future Intersection LOS (2030)

No.	Intersection	Control Type	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Riggin Avenue/Shirk Road	Signal	25.7	C	31.9	C
2	Riggin Avenue/Demaree Street	Signal	22.3	C	26.9	C
3	Riggin Avenue/Giddings Street	Signal	14.8	B	16.6	B
4	Riggin Avenue/Dinuba Boulevard	Signal	29.3	C	37.6	D
5	Ferguson Avenue/Linwood Street	AWSC	18.7	C	12.2	B
6	Goshen Avenue/Plaza Drive	Signal	25.3	C	25.7	C
7	Houston Avenue/Demaree Street	Signal	42.0	D	31.8	C
8	Houston Avenue/Ben Maddox way	Signal	22.6	C	41.0	D
9	Houston Avenue/McAuliff Street	Signal	27.9	C	16.9	B
10	Hurley Street/Plaza Drive	Signal	24.9	C	38.2	D
11	Hillsdale Avenue/Akers Street	Signal	25.6	C	34.2	C
12	Mineral King Avenue/Akers Street	Signal	34.0	C	31.2	C
13	Noble Avenue/Akers Street	Signal	48.3	D	45.5	D

Table 4-7: Future Intersection LOS (2030)

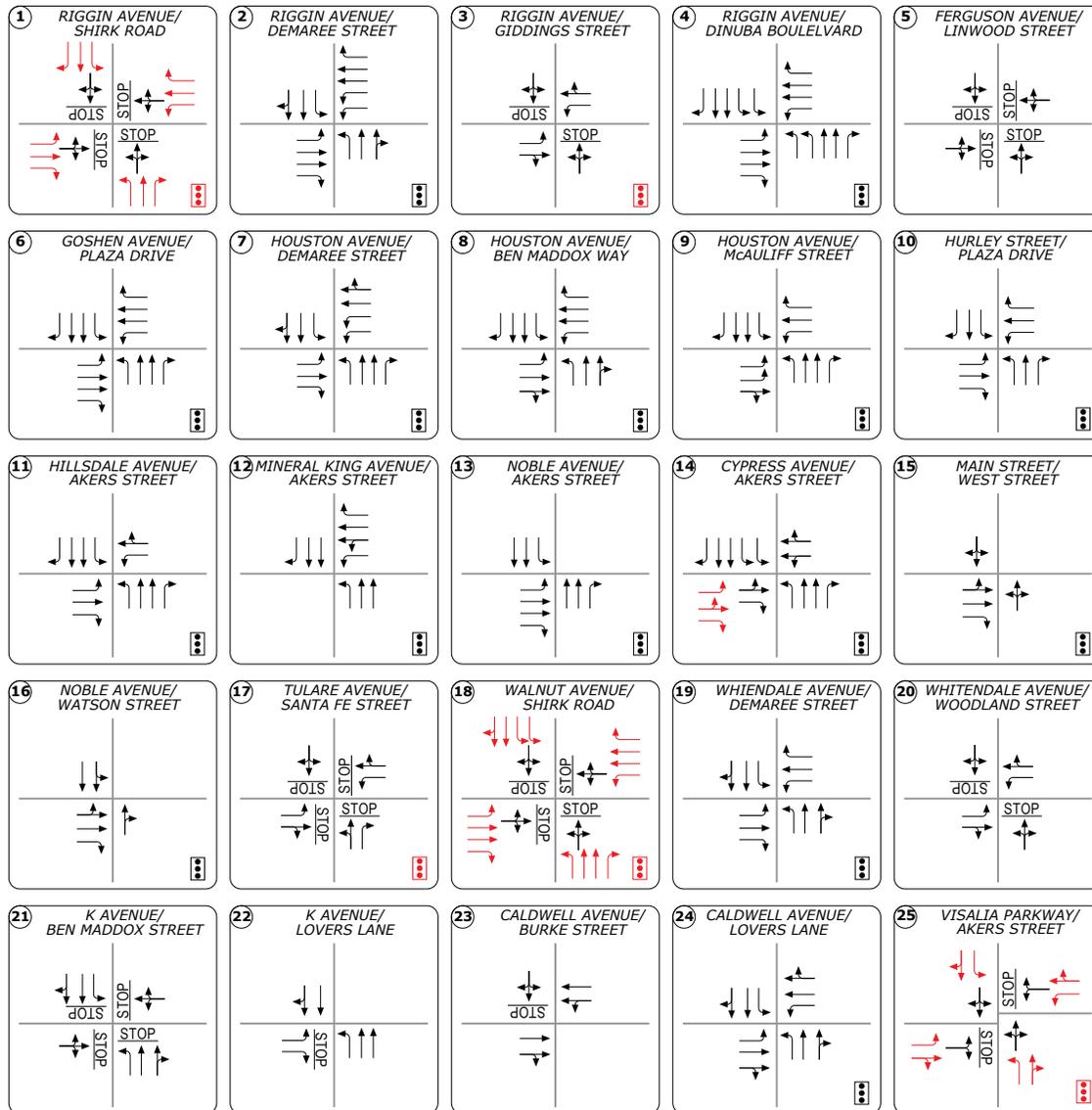
No.	Intersection	Control Type	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
14	Cypress Avenue/Akers Street	Signal	20.0	C	30.5	C
15	Main Street/West Street	Signal	6.3	A	7.7	A
16	Noble Avenue/Watson Street	Signal	13.7	B	11.5	B
17	Tulare Avenue/Santa Fe Street	Signal	27.8	C	33.9	C
18	Walnut Avenue/Shirk Road	Signal	30.3	C	25.2	C
19	Whitendale Avenue/Demaree Street	Signal	14.5	B	16.6	B
20	Whitendale Avenue/Woodland Drive	Signal	8.8	A	9.7	A
21	K Avenue/Ben Maddox Way	AWSC	18.8	C	34.1	D
22	K Avenue/Lovers Lane	Signal	14.3	B	14.7	B
23	Caldwell Avenue/Burke Street	Signal	12.1	B	13.3	B
24	Caldwell Avenue/Lovers Lane	Signal	25.5	C	54.5	D
25	Visalia Parkway/Akers Street	Signal	18.0	B	17.4	B

AWSC = All-Way-Stop Control

For Signalized Intersections Average Delay = Average Intersection Delay; For Signalized Intersections LOS = Average Intersection Level-of-Service; AWSC Intersections Average Delay = Worst-Case Intersection Movement Delay; For AWSC Intersections LOS = Worst-Case Movement's Level-of-Service

Source: *Omni-Means, 2014.*

Figure 4-3: Year 2030 Improved Lane Geometrics and Control



Source: Omni-Means, 2014.

Table 4-8 identifies projected average daily traffic and LOS in 2030 at 33 study roadway segments. Projected 2030 traffic volumes, consistent with the proposed General Plan land uses, are shown below.

Table 4-8: Future Roadway LOS (2030)

<i>Roadway Segment</i>	<i>Limits</i>	<i>No. of Lanes</i>	<i>Facility Type</i>	<i>AADT</i>	<i>LOS</i>
Akers Street	Rialto – Caldwell Avenue	4	Arterial	15,540	A
Akers Street	Goshen Avenue – Ferguson Ave.	4	Arterial	32,550	D
Caldwell Avenue	Shirk Street - Aspen	4	Arterial	18,300	A
Caldwell Avenue	Ben Maddox Way – Pinkham Ave.	4	Arterial	21,200	B
Center Avenue	Floral Street – Court Street	2	Arterial	3,220	A
County Center	Beech Street – Walnut Avenue	2	Collector	6,110	B
Demaree Street	Damsen - Nicholas	4	Arterial	32,010	D
Demaree Street	Walnut Avenue – Tulare Avenue	4	Arterial	25,800	B
Goshen Avenue	Demaree Street – Chinowth Street	4	Arterial	35,250	D
Main Street	Floral Street – Court Street	2	Collector	3,710	A
Noble Avenue	Pinkham Street – Lovers Lane	2	Arterial	13,000	C
Riggin Avenue	Akers Street – Linwood Street	4	Arterial	19,800	B
Santa Fe Street	Center Avenue – School Street	4	Collector	12,310	B
Santa Fe Street	Walnut Avenue – Tulare Avenue	4	Collector	13,610	B
Shirk Avenue	Goshen Avenue – Doe Avenue	4	Arterial	20,660	A
Shirk Avenue	Walnut Avenue – State Route 198	4	Arterial	24,900	B
Walnut Avenue	Atwood – Linwood Street	4	Arterial	14,400	A
Walnut Avenue	Conyer Street – Court Street	4	Arterial	17,660	A
Walnut Avenue	Yale – Mall Entrance	4	Arterial	13,040	A
Whitendale Avenue	Crenshaw – Linwood Street	2	Collector	6,940	B
Whitendale Avenue	West Street – Court Street	2	Collector	7,060	B
State Route 63	Caldwell Avenue – Walnut Avenue	6	State Route	29,730	A
State Route 63	Walnut Avenue – Tulare Avenue	6	State Route	31,900	A
State Route 63	School Avenue – Murray Avenue	4	State Route	26,630	C
State Route 99	Caldwell Avenue – State Route 198	6	State Route	97,200	C

Table 4-8: Future Roadway LOS (2030)

Roadway Segment	Limits	No. of Lanes	Facility Type	AADT	LOS
State Route 99	State Route 198 – Avenue 304	6	State Route	84,420	B
State Route 99	Avenue 304 – Betty Drive	6	State Route	84,420	B
State Route 198	State Route 99 – Akers Street	4	State Route	76,020	E
State Route 198	Akers Street – Mooney Boulevard	4	State Route	89,890	F
State Route 198	Mooney Boulevard – Lovers Lane	4	State Route	84,400	F
State Route 198	Lovers Lane – Road 156	4	State Route	42,810	A
State Route 216	Mill Creek Parkway – Douglas Ave.	4	State Route	24,540	B
State Route 216	Lovers Lane – McAuliff Street	2	State Route	15,840	C

Source: TCAG Regional Travel Demand Forecast Model; Omni-Means, 2014.

As shown in Table 4-8, the three roadway segments along State Route 198 between State Route 99 and Lovers Lane are projected to operate at unacceptable LOS F conditions at buildout. The State Route 198 Route Concept Report identifies this as a full-build six-lane freeway in the future between Road 80 and Downtown Visalia, which would accommodate traffic projections along these segments. However, State Route 198 between State Route 99 and Road 80 and east of Downtown Visalia to Lovers Lane needs to be a six-lane freeway based upon the TCAG RTDFM forecasts.

Objectives

T-0-5 Plan and develop a transportation system for Visalia that contributes to community livability, recognizes and respects community characteristics, and minimizes negative impacts on adjacent land uses.

Policies

T-P-22 Require all residential subdivisions to be designed to discourage use of local streets as a bypass to congested arterials, and when feasible, require access to residential development to be from collector streets.

Local streets should not serve as “cut-throughs” for through traffic; at the same time, the local street network should still emphasize connectivity and minimize dead-ends and cul-de-sacs, while also providing for neighborhood safety. A finer-grained street grid can provide for more neighborhood connectivity.

T-P-23 Require that all new developments provide right-of-way, which may be dedicated or purchased, and improvements (including necessary grading, installation of curbs, gutters, sidewalks, parkway/landscape strips, bike and parking lanes) other city street design stan-

dards. Design standards will be updated following General Plan adoption.

Developments must also dedicate or sell necessary rights-of-way when subdivision or development of property adjacent to Circulation Element streets is proposed.

- T-P-24** Require that proposed developments make necessary off-site improvements if the location and traffic generation of a proposed development will result in congestion on major streets or failure to meet LOS D during peak periods or if it creates safety hazards.

Such improvements may be eligible for credit or reimbursement from traffic impact fees.

- T-P-25** Require that where arterial streets are necessary through residential areas, residential development shall be oriented away (side-on or rear-on) from such streets and be properly buffered so that traffic carrying capacity of the street will be preserved and the residential environment will be protected from the adverse characteristics of the arterial street.

This policy also may apply to collector streets if circumstances warrant.

- T-P-26** Require that future commercial developments or modifications to existing developments be designed with limited points of automobile ingress and egress, including shared access, onto major streets.

- T-P-27** Work with Caltrans to modify the State Route 198 Route Concept Report to ensure that the facility is designated as a six-lane freeway from Downtown Visalia east to Lovers Lane.

- T-P-28** Promote traffic safety by requiring that ingress and egress to shopping centers be carefully designed, with minimal use of left-turn movements into and out of these centers.

Existing points of automobile ingress and egress, including shared access, should be consolidated wherever possible. Left turn movements into commercial areas from divided arterials, must be justified by demonstrating substantial reduction in U-turns at arterial roadways or other benefits.

- T-P-29** Require, where possible, that arterials and collectors form four-leg, right-angle intersections. Jogged, offset, and skewed intersections at major streets in near proximity shall be avoided, where possible.

4.5 PUBLIC TRANSIT

The City of Visalia has a variety of public transportation options including fixed route service and demand-responsive systems as well as local and regional systems. Visalia's Transit Division operates numerous mass transportation services, allowing residents to travel conveniently from neighborhoods to major shopping centers, local schools, medical offices, and work sites. The following public transportation systems are available to Visalia residents.

Local Systems

Visalia Transit

Visalia Transit (VT) provides a local fixed route system for Visalia residents and visitors alike. VT operates several fixed routes that serve city residents with some routes serving the outlying cities and communities. VT operates fixed route service 7 days a week with operational hours Monday through Friday between 6:00 a.m. and 9:30 p.m., 9:00 a.m. and 6:30 p.m. on Saturdays, and between 8:00 a.m. and 6:30 p.m. on Sundays. All fixed routes are shown in Figure 4-3. The VT fixed routes are summarized below:

- Route 1 – Transit Center, TCAG Transfer, Mooney Boulevard, College of Sequoias, Visalia Mall, Sequoia Mall, downtown Visalia;
- Route 2 – Transit Center, Locust Street/Court Street, Caldwell Avenue, Linwood Avenue, Whitendale Avenue, El Diamante School, S. Akers Street;
- Route 4 – Transit Center, Locust Street/Court Street, Tulare Avenue, Mt. Whitney School, Divisadero School, Kmart Shopping Center, Visalia Medical Clinic;
- Route 5 – Transit Center, Houston Avenue, Valley Oak School, Golden West School, DMV, Walmart;
- Route 6 – Transit Center, Goshen Avenue/Murray Avenue, Save-Mart Shopping Center, Industrial Park, San Joaquin Valley College, Goshen Walnut Avenue, Giddings Street, Whitendale Avenue, Mooney Boulevard, County Center Drive, Linwood Street, Akers Street, Tulare Avenue;
- Route 7A – Transit Center, Lincoln Oval, N. Court Street, W. Riggan Avenue, Demaree Street, W. Ferguson Avenue, W. Houston Avenue, Mooney Boulevard;
- Route 7B – Transit Center, Lincoln Oval, Mooney Boulevard/Houston Avenue, Ferguson Avenue/County Center Drive, Riggan Avenue/Giddings Street, Ferguson Avenue/Court Street, Locust Street/NW 2nd Street;
- Route 8A – Transit Center, Center Avenue, Santa Fe Street/Tulare Avenue, Walmart, Lovers Lane/Mineral King Avenue, Valley Oak Middle School, Ben Maddox Way, St. John’s Parkway;
- Route 8B – Transit Center, Ben Maddox Way/St. John’s Parkway, Valley Oak Middle School, Lovers Lane/Mill Creek, Walmart, Santa Fe Street/Tulare Avenue;
- Route 9 – Transit Center, Main Street., S. Ben Maddox Way, E. Walnut Avenue, Farmersville, Visalia Road, Exeter;
- Route 10 – Transit Center, Mineral King Avenue, Noble Avenue, Visalia Airport, Goshen,;
- Route 11 – Transit Center, Mineral King Avenue, Noble Avenue, Goshen;
- Route 12 – Caldwell Avenue, Visalia Parkway, Cameron Avenue, S. Court Street, Exeter, Farmersville; and
- Routes 106 and 610.



Visalia's Transit Division operates numerous mass transportation services, allowing residents to travel conveniently from neighborhoods to major shopping centers, local schools, medical offices, and work sites.

Dial-A-Ride Visalia

Visalia Transit provides Dial-A-Ride curb-to-curb paratransit service on a shared-ride, demand-response basis to locations within the city limits of Visalia, Goshen, Farmersville and to/from Exeter. Reduced fares are available for the following groups:

- Certificate of eligibility of ADA Paratransit services
- Visalia City Coach Disabled ID card
- Medicare Card holders
- California DMV Disabled Person or Disabled Veteran ID

Visalia Dial-A-Ride operates between 6:00 a.m. to 9:30 p.m. during the weekdays, from 9:00 a.m. to 6:30 p.m. on Saturdays and from 8:00 a.m. to 6:30 p.m. on Sundays. Fares range from \$1.75 to \$3.25 per passenger and monthly passes are available with limited service available on holidays.

Visalia Towne Trolley

The Visalia Towne Trolley offers three fixed routes and operates between 7:30 a.m. and 11:00 p.m. depending on the route. During the hours of operation the headway is 10 to 15 minutes. There is a \$0.25 service charge to rider with an optional monthly pass for \$5.00 and the service limits are bounded by Murray Avenue, Acequia Avenue, Tulare County Courthouse and Santa Fe Street.

The Loop Route

The Loop Route provides a fun, easy, and safe way for all school-aged kids to access community and recreation centers in Visalia, including:

- Manual Hernandez Community Center
- Wittman Center
- Anthony Community Center
- Boys & Girls Club
- Redwood High School Pool
- PAL Center

This program is funded through the City general fund and Measure R and does not receive money from state or federal sources.

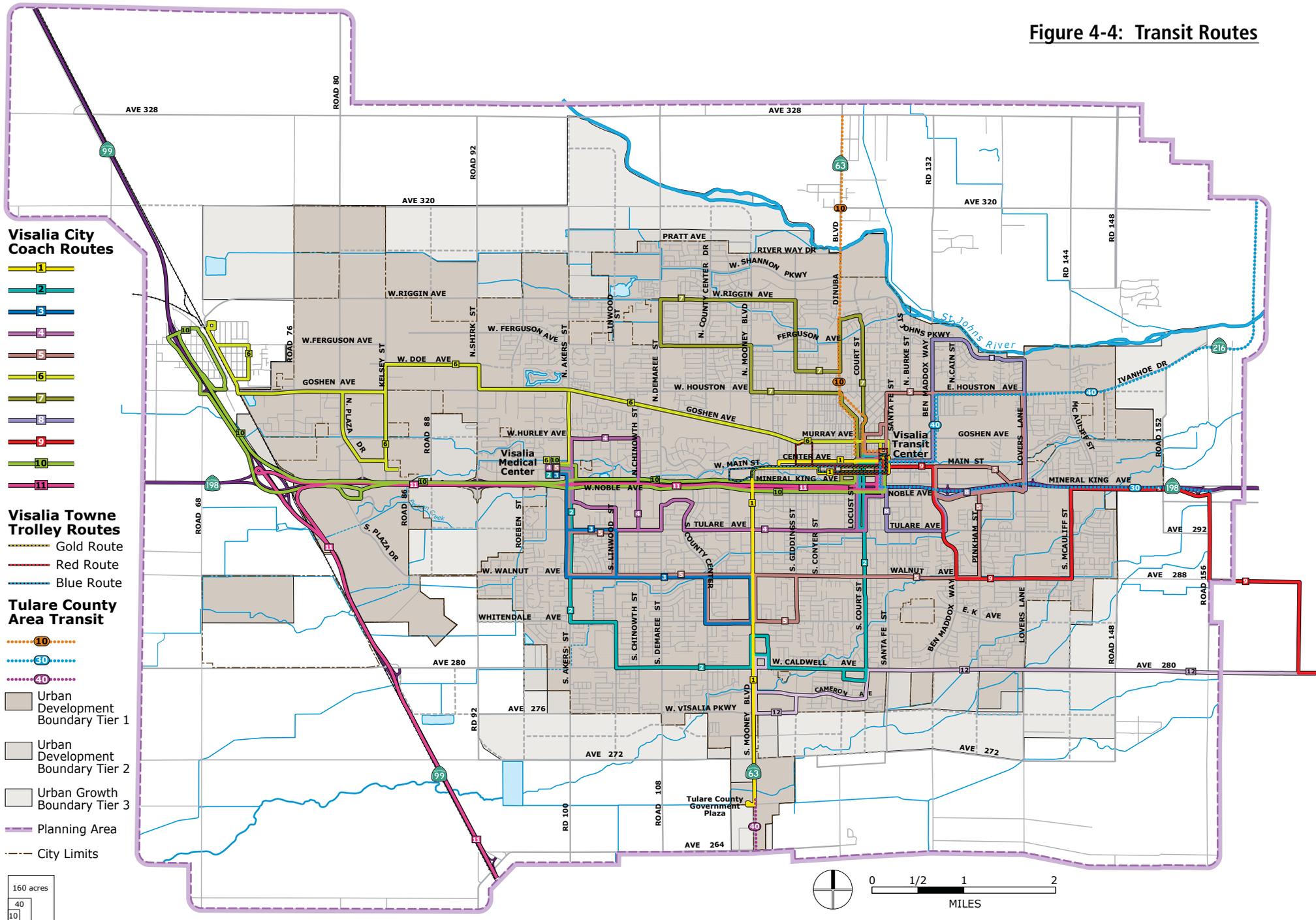
All local transit routes are shown in **Figure 4-4**.

Sequoia Shuttle

The Sequoia Shuttle serves Sequoia and Kings Canyon National Parks during the peak summer visitation period. Sequoia Shuttle departs Visalia five times per day, seven days per week. In Visalia pick-up/drop-off locations include the Holiday Inn, Fairfield Inn, La Quinta, Hampton Inn, Lamplighter Inn, Convention Center (serving Marriott Hotel and Comfort Suites), the Visalia Transit Center, the Barn Service station in Exeter, Three Rivers Comfort Inn, and the Three Rivers Memorial Building. The Sequoia Shuttle offers service between Memorial Day and Labor Day seven days a week, charging \$15 per passenger.

The City operates the Sequoia Shuttle routes inside the Park under an agreement with the National Parks Service. Sequoia and Kings Canyon National Parks also provide three internal transit routes to the various attractions.

Figure 4-4: Transit Routes



Regional Systems

Visalia Transit

Visalia Transit regional routes also serve the outlying community of Goshen and the cities of Exeter and Farmersville. These services provide access to medical care facilities, schools, recreational facilities and other amenities offered in Visalia. These routes provide service between the hours of 6:00 a.m. and 9:30 p.m. on weekdays, and between 6:00 a.m. and 6:30 p.m. on Saturdays and Sundays. Regional services are provided through an agreement with Tulare County and the affected communities and schools.

Other services provided for regional travel through Visalia include Orange Belt Stages, Greyhound and Amtrak connections to Hanford (Kings County). Tulare County Area Transit (TCaT) and Kings County Area Regional Transit (KART) provide connections to Visalia Transit Center, local schools, medical centers and other necessities.

Tulare County Area Transit

Tulare County Area Transit (TCaT) provides reliable and convenient public transit service between cities as well as intra-city transit service for many small communities throughout Tulare County. Fixed route services are offered Monday through Saturday, demand-response Dial-A-Ride services are offered Monday through Friday. All ages are welcome to ride all transit service. TCaT offers eight fixed routes that serve a majority of the population centers and communities. Fixed route service is listed below:

- Route 10 – serves north Tulare County with stops at the Justice Complex, Dinuba, Sultana, Cutler, Orosi, Yetttem and Seville.

- Route 20 – serves southern Tulare County with stops in Tulare, Tipton, Pixley, Earlimart, Delano and Richgrove.
- Route 30 – serves eastern Tulare County with stops at the Transit Center, in Ivanhoe, Woodlake, Lemon Cove and Three Rivers.
- Route 40 – serves central Tulare County with stops at the County Government Center, in Tulare, Lindsay, Strathmore and Porterville.
- Route 50 – serves northwest Tulare County with stops in Dinuba, London, Traver and Delft Colony.
- Route 60 – serves southeast Tulare County with stops in Lindsay, Strathmore, Plainview and Woodville.
- Route 70 – serves southeast Tulare County will service to Springville and Porterville.
- Route 90 – serves Woodville, Poplar and Porterville.

TCaT regional transit routes are shown in **Figure 4-4**.

Kings Area Rural Transit

Kings Area Rural Transit (KART) is Kings County's complete public rural and urban transportation provider. KART provides daily routes to the cities of Hanford and Lemoore, and regular service to most other communities in the county and daily weekday service to Visalia. In addition, KART provides transportation to Fresno every Monday, Wednesday and Friday and Dial-A-Ride service to eligible residents of Hanford, Lemoore, Armona and Avenal.

All KART bus routes begin and end at the Intermodal transfer facility west of Amtrak on 7th Street in Downtown Hanford. KART fixed routes provide service to Visalia via the Hanford-Visalia route. The Hanford-Visalia route makes stops at the College of Sequoias, Mooney Boulevard/Packwood Creek and Visalia Transit Center.

Orange Belt Stages

Inter-regional, statewide and nationwide bus transportation is provided to the Visalia area via Orange Belt Stages. The Orange Belt Stages depot is located centrally in the Downtown Visalia area, at 425 East Oak Street between Bridge and Santa Fe Streets (the Visalia Transit Center).

Potential Future Transit Improvements

The General Plan identifies potential transit corridors along Goshen Avenue and Mooney Boulevard, with Downtown segments along Murray Avenue and Main Street. These corridors may support high-capacity transit in the form of light rail or bus rapid transit (BRT), and provide a framework for transit-oriented development in Visalia.

Objectives

- T-0-6** Work with other agencies and jurisdictions that provide regional public transportation to provide connectivity between Visalia and adjacent jurisdictions.
- T-0-7** Develop and maintain a coordinated mass transportation system that will encourage increased transit use through convenient, safe, efficient, and cost-effective services.

Policies

- T-P-30** Give high priority to public transportation systems that are responsive to the needs of commuters, the elderly, persons with disabilities, the youth, and low income citizens. Continue to work with transit providers to expand services to these populations and to underserved areas of the City.
- T-P-31** Seek cooperation with Tulare County Association of Governments and Visalia City Coach to attain a balance of public transportation opportunities.

These efforts may include the establishment of criteria to implement transit improvements, development of short and long range transit service plans, evaluation and identification of needed corridor improvements, transit centers, and park-and-ride lots with amenities for bicyclists.

- T-P-32** Work with transit operators to ensure that adequate transit service facilities are provided, including bus turn-outs along arterials when needed, and bus stop amenities including, but not limited to, lighted shelters, benches and route information signs.
- T-P-33** Work with transit operators to establish transit stops adjacent to community and regional parks, senior housing facilities, areas with a high concentration of medical facilities, major employment centers, and major retail and commercial centers.



The Visalia Transit Center is the hub for all of Visalia's bus routes, including the Visalia Towne Trolley and the Sequoia Shuttle.

T-P-34 Develop design and development standards to improve transit service in the community, such as wider sidewalks to accommodate bus stops and bus shelters at intersections; bus pads with shelter and shading vegetation; widened rights-of-way for buses; dedicated bus lanes; on-site transit stops for commercial public, institutional and industrial facilities; and, bus facilities adjacent to day-care centers, schools, and major residential areas.

T-P-35 Schedule public transportation improvement projects in the Capital Improvements Program.

T-P-36 Participate in the planning process for a potential Cross Valley Rail Line, which could provide east-west light rail service from Visalia to Huron and potentially connect to a future High Speed Rail system.

T-P-37 Evaluate the feasibility of a future local light rail system or bus rapid transit (BRT) system in Visalia, which could connect to Tulare to the south and points east and west.

The City should preserve right of way to support the preliminary light rail corridor or BRT system along Goshen Avenue, K Street, Santa Fe Avenue, and other roadways, if either system is judged financially feasible.

T-P-38 Support regional high-speed inter-city rail development and service. Should California High Speed Rail develop a station in Hanford (or elsewhere in Kings or Tulare County), work with the California High Speed Rail

Authority to develop local connections coordinated with the train schedule.

4.6 BICYCLES, TRAILS AND PEDESTRIAN CIRCULATION

Bicycling and walking are inexpensive, energy-conserving, healthful, and non-polluting modes of transportation. Visalia's flat topography and dry, moderate climate make choosing to walk or bicycle an attractive transportation option during much of the year.

As pedestrian and bicycle travel is directly related to perceived safety and convenience, providing a safe and complete network of pedestrian and bicycle facilities should continue to increase the use of these modes of travel, especially when crossing heavily traveled roads such as State Routes 63 and State Route 65.

Bikeways and Trails

From a bicyclist's perspective, Visalia is an attractive location to travel. First, the many quiet, tree-shaded side streets offer comfort and safety. Second, the size of the city makes practically all parts accessible by all residents within a 30-minute bicycle ride. During the summer time, when intense summer sun and heat are at their greatest, bicyclists and pedestrians may be deterred. Otherwise, the flat topography and mild rainfall are ideal for commuting and recreational bicycle riding.

Once considered a primarily recreational activity, bicycling is now recognized as a viable alternative to the automobile. Benefits of increased bicycle use include reduced traffic, reduced consumption of fuel resources, improved air quality and reduced health

care costs due to a healthier population. Bicycling is a vital component of improving environmental, traffic and quality of life concerns for Visalia residents.

City of Visalia Bikeway Plan

The City of Visalia Bikeway Plan was adopted in February 2011 and is intended to guide bikeway policies, programs and facility improvements to improve safety, comfort and convenience for all bicyclists in the City of Visalia. The Bikeway Plan serves as a tool for the City in implementing its goal to “provide the means and support bicycling as an alternative mode of transportation for work, errand and recreational trips.”

The Bikeway Plan encourages the use of walking and bicycling and recognizes three classes of bikeways:

- Bike Path (Class I Bikeway, including paseos and public greenways). Provides a completely separated right-of-way designated for the exclusive use of bicycles and pedestrians with cross flows by motorists minimized.
- Bike Lane (Class II Bikeway). Provides a restricted right-of-way designated for the exclusive or semi-exclusive use of bicycles with through-travel by motor vehicles or pedestrians prohibited, but with vehicle parking and crossflows by pedestrians and motorists permitted.
- Bike Route (Class III Bikeway). Provides right-of-way designated by signs or permanent markings and shared with pedestrians and motorists.

While the City has yet to fully implement the network presented in the Bikeway Plan, several Class I, II and III facilities exist and are included in the standard cross-section specifications for the various street classifications.

Figure 4-5 shows the bikeway system, with the present facilities in solid lines and the proposed expansion of the system shown in dashed lines. Completion of this network would provide Visalia with a robust bicycle and pedestrian network, linking neighborhoods to parks, schools, employment centers, and other destinations. In addition to the bicycle infrastructure, Visalia offers bicycle racks on buses for most of the Visalia Transit fleet. The bicycle racks extend the bicycles ranges and offer connections to the cities of Woodlake, Tulare, Exeter and Farmersville.



Visalia's flat topography and mild rainfall are ideal for commuting and recreational bicycle riding. The Bikeway Plan encourages the use of walking and bicycling and recognizes three classes of bikeways, including Class I trails (top) and Class II bike lanes (bottom).

Pedestrian Circulation

Walking is the most universal form of travel. Every personal trip involves some element of walking, whether it is a pure pedestrian trip or combined with other modes of travel such as transit, driving or cycling. A pedestrian is legally defined as a person who walks from one place to another either by foot or using an assisted mobility device. Pedestrians include citizens of Visalia and visitors of all ages and abilities. The pedestrian circulation system in Visalia is mainly comprised of sidewalks. Currently, the street environment is mostly auto-oriented with wide roadways and discontinuous sidewalks. In some areas, there are no existing sidewalks or they have fallen into disrepair.

Besides standard sidewalks that have been developed in residential and non-residential areas, several multi-use (bike/pedestrian) trails are found throughout the city, including the St. John's Parkway, Mill Creek, Goshen Avenue, and others. Visalia Unified School District and the City of Visalia are also actively involved in pursuing federal and state Safe Routes to School (SR2S) grant programs that promote adequate pedestrian facilities in neighborhoods near schools. In addition, the City of Visalia is committed to complying with Americas with Disabilities Act (ADA) standards with new development and bringing non-standard ADA facilities into compliance.

While sidewalk capacity is generally not an issue, all areas should be designed to a scale that accommodates pedestrians and bicyclists (in areas where bikeways are unavailable). Improvements in areas within the City that currently have undersized, damaged or no pedestrian facilities should be prioritized so that the pedestrian system will be better connected. The new neighborhood centers should also be designed to

be pedestrian friendly. In these areas, wider sidewalks should be considered to accommodate increased flows and to give preferential treatment to pedestrians. Pedestrian-friendly facilities should also be provided near transit stops and adjacent to medium and higher density residential areas.

Objectives

- T-0-8** Encourage walking and bicycling in Visalia for commuting and recreational purposes, and for improvement of public and environmental health.
- T-0-9** Promote non-motorized accessibility through development of a connected, convenient pedestrian and bikeway network.
- T-0-10** Create a safe and feasible pedestrian, trail and bikeway system (on- and off-street) for commuting, recreation and other trips, serving pedestrians and cyclists of all levels.
- T-0-11** *Recognize and meet the mobility needs of persons using wheelchairs and those with other mobility limitations.

Policies

Bicycle Transportation and Trails System

- T-P-39** Develop bikeways consistent with the Visalia Bikeway Plan and the General Plan's Circulation Element.
 - Provide Class I bikeways (right-of-ways for bicyclists and pedestrians separated from vehicles) along the

St. Johns River, Cameron Creek, Packwood Creek, Mill Creek, Modoc Ditch, the Santa Fe Railroad right-of-way and the San Joaquin Railroad right-of-way;

- Provide Class II bikeways (striped bike lanes) along selected collector and arterial streets; and
- Provide Class III bikeways (shared-use bike routes) along selected local, collector, and arterial streets.

New bikeway segments should be designed to fit together with existing bikeways to create a comprehensive, safe system including scenic routes for recreational use.

- T-P-40** Develop a community-wide trail system along selected planning area waterways, consistent with the Waterways and Trails Master Plan and General Plan diagrams.

The system will feature greenway trail corridors along the St. John's River, Mill Creek, Packwood Creek, and Cameron Creek, as well as segments of Modoc and Persian creeks. The waterway corridors will provide recreational opportunities, new links between neighborhoods, parks, and Downtown, and a new way of experiencing the City and understanding its natural setting. Waterway corridors will also provide enhanced habitat and storm drainage, as described in the Community Waterways section.

- T-P-41** Integrate the bicycle transportation system into new development and infill redevelopment. Development shall provide short term

bicycle parking and long term bicycle storage facilities, such as bicycle racks, stocks, and rental bicycle lockers. Development also shall provide safe and convenient bicycle and pedestrian access to high activity land uses such as schools, parks, shopping, employment, and entertainment centers.

- T-P-42** Periodically update the City of Visalia Bike-way Plan, as needed.

- T-P-43** Develop and maintain an educational program to promote bicycle use and safety.

- T-P-44** Increase the safety of those traveling by bicycle by:

- Sweeping and repairing bicycle paths and lanes on a regular basis;
- Ensuring that bikeways are signed and delineated according to Caltrans or City standards, and that lighting is provided as needed;
- Providing bicycle paths and lanes on bridges and overpasses;
- Ensuring that all new and improved streets have bicycle-safe drainage grates and are free of hazards such as uneven pavement or gravel;
- Providing adequate signage and markings warning vehicular traffic of the existence of merging or crossing bicycle traffic where bike lanes and routes make transitions into or across roadways.

T-P-45 Require that collector streets that are identified to function as links for the bicycle transportation system be provided with Class II bikeways (bike lanes) or signed as Class III bike route facilities.

In such cases, the City may accommodate cyclists on these identified streets by widening the street or eliminating on-street parking if this will not significantly affect parking opportunities for local shoppers or by clearly indicating that bicycles may share travel lanes with automobiles.

T-P-46 Cooperate with other agencies to provide connection and continuation of bicycle corridors between Visalia and surrounding areas.

T-P-47 Seek funding at the private, local, state, and federal levels for the expansion of the bicycle transportation system.

Pedestrian Circulation

T-P-48 Require construction of minimum sidewalk widths and pedestrian “clear zones” consistent with the Complete Streets cross-sections in this General Plan and with the City’s Engineering and Street Design Standards for each designated street type.

T-P-49 *Work with the Visalia Unified School District, other school districts, and the County Superintendent of Education, to promote creation of school attendance areas so as to minimize students’ crossings of major arterial streets and facilitate students’ safe travel to school on foot.

T-P-50 *Provide pedestrian facilities that are accessible to persons with disabilities and ensure that roadway improvement projects address accessibility and use universal design concepts.

T-P-51 Locate sidewalks, pedestrian paths, and appropriate crosswalks to facilitate access to all schools and other areas with significant pedestrian traffic. Whenever feasible, pedestrian paths shall be developed to allow for unobstructed pedestrian flow from within a neighborhood.

T-P-52 Require, where security walls or fences are proposed for residential developments along arterial or collector streets, that pedestrian access be provided between the arterial or collector and the subdivision to allow access to transit vehicles operating on an arterial or collector street.

4.7 PARKING

Parking decisions affect land use and development patterns, as well as travel behavior. The placement and type of parking must accommodate the needs of businesses, pedestrians, motorists, and residents, while not overwhelming the urban design.

Parking regulations can help to provide accessible, attractive, secured parking facilities as well as manage supply. New ideas about parking include shared parking, multi-use parking lots, and the use of pervious surfaces with water runoff filtering systems and the use of solar panels to provide shade as well as energy production.



Pedestrian-friendly streets should be provided near transit stops and adjacent to medium and higher density residential areas (top).

Pedestrian access should be provided between neighborhoods and adjacent arterials or collectors to facilitate walking, including walking to transit (bottom)..



Following the Downtown parking and circulation study, the City will develop flexible parking requirements based on “best practices.”

Downtown Parking

The City of Visalia is currently preparing a Downtown parking and circulation study. The study will analyze traffic patterns, biking, walking, parking and how to improve traffic flow in the 70-block area bounded by Oak Street on the north, Santa Fe Street on the east, Noble Avenue on the south and Conyer on the west. The study is still underway.

Among the items to be studied are: integration of future development with a balanced street/transit/bicycle network; level of service for vehicles on downtown streets; transit ridership; existing bike routes and bike facilities; walkability of Visalia’s downtown and how downtown streets will handle growth into 2020 and 2030; and parking accommodations to meet future demand. The study will also consider the option of closing Willis and West streets to through traffic, extending Burke Street, and widening Santa Fe Street to four lanes between Noble and Race streets.

Objectives

T-O-12 Provide adequate parking to accommodate demand while avoiding excessive amounts of surface parking that disrupts the urban fabric of the city.

Policies

T-P-53 Develop flexible parking requirements in the zoning ordinance for development proposals based on “best practices” and the proven potential to reduce parking demand.

These could include projects that integrate transit facilities, incorporate a mix of uses with differing peak parking demand periods (e.g., residential and office), incorporate shared parking or common area parking, or incorporate other Transportation Demand Management (TDM) Strategies for residents or tenants (car-sharing, requiring paid parking, etc.).

T-P-54 Discourage non-residential parking on residential streets by enforcing parking regulations and ensuring that businesses near residential areas are providing adequate on-site parking for their employees and customers.

T-P-55 If certain neighborhoods are particularly negatively affected by “spill-over” parking from businesses or institutions, consider establishing a residential permit parking program.

T-P-56 If needed, create public parking benefit assessment districts to fund consolidated public parking where supported by local businesses.

T-P-57 Amend the Zoning Ordinance to include updated off-street parking and loading area design standards that have multiple benefits and reduce environmental impacts. Strategies may include, but are not limited to:

- Require parking and loading to be provided on the side of or behind buildings, where feasible;
- Promote the use of time and/or motion sensitive parking lot and security lights, where feasible;

- Establish specific standards for perimeter landscaping for parking lots and structures;
- Separate pedestrian pathways from car lanes where feasible;
- Promote the use of porous pavement and low impact drainage features, as appropriate to the site; and
- Restrict use of vacant lots as vehicle parking and outdoor storage of commercial equipment, construction equipment, and similar unless screened from public view.

T-P-58 Continue to implement and update, as necessary, the latest Downtown Parking Management Plan.

A Downtown parking needs assessment and survey should be conducted periodically to determine the adequacy of the Downtown Parking Management Plan and to indicate when the Plan should be updated and how needs might be better balanced.

4.8 GOODS MOVEMENT

Truck Routes

In addition to moving people, the roadway system in Visalia carries a substantial number of trucks moving goods. These routes are designed to allow truck traffic to pass through the City with minimal impact on residential neighborhoods as well as local vehicular and pedestrian traffic.

Existing truck routes within Visalia were developed to minimize neighborhood disturbance and consist primarily of freeways, select expressways, and a few arterial and collector streets. Section 3012 of the Municipal Code has designated certain streets within the city as truck routes. Trucks may use other streets for access to particular destinations, with the exception of certain streets from which they are expressly prohibited. Truck routes may be modified by resolution by the City Council as needed. Designated truck routes are shown in **Figure 4-6**.

Objectives

T-O-13 Provide a transportation system that effectively transports goods via trucks and rail with minimal disruption to residential areas.

Policies

T-P-59 Identify and sign designated truck routes in Visalia, ensuring that clear signage is provided from freeways to truck routes in the city.

T-P-60 Ensure that truck routes are designed according to the Surface Transportation Assistance Act standards for intersections, pavement, and turning movements.



Truck routes have been identified to minimize neighborhood disturbance, and consist primarily of freeways, expressways, and a few arterial and collector streets.

- T-P-61** Encourage high-security off-street parking areas for tractor-trailer rigs in industrial areas.
- T-P-62** Explore possible funding sources, including truck user fees if feasible, to help finance truck route improvements and truck parking areas, at least in part.
- T-P-63** Continue to improve and maintain the condition and safety of existing railroad crossings by upgrading surface conditions and installing signs and signals where warranted.
- T-P-64** Explore possible funding sources, including truck user fees if feasible, to help finance truck route improvements and truck parking areas, at least in part.
- T-P-65** Prohibit the use of arterial streets for freight loading and unloading.

Rail

Union Pacific (UP), Burlington Northern & Santa Fe (BNSF), and San Joaquin Valley Railroad (SJVRR) provide freight service to Visalia, connecting the city and Tulare County to major markets in California (Oakland/San Francisco/San Jose, Sacramento, and Los Angeles) and to other destinations. Routes of principal rail lines in the county are identified in **Figure 4-6**. Freight terminals and service to specific industries are located throughout the county. Though the railroads are reluctant to provide information on the amount of freight originating in the county, it is likely that the predominant mode for freight movements in the county will continue to be by truck in the foreseeable future.

Passenger rail service (six round trips daily) in the county is provided by Amtrak on its San Joaquin service, with the nearest rail station located in Hanford (Kings County). Amtrak provides bus connections to and from Visalia (twice daily) and Goshen Junction (two times daily) to the Hanford station. Either Orange Belt Stages or Greyhound provides service to Amtrak from downtown Visalia.

Cross Valley Rail Project

The Cross Valley Rail improvement project was completed in 2003. The line allows food processing and industrial businesses to ship by rail as opposed to heavy-duty trucks. Funding was made possible through funds from public and private entities, including Congestion Management Air Quality Improvement Program funds from Tulare, Kings, and Fresno County councils of governments, contributions from the Los Gatos Tomato Company and the San Joaquin Valley Air Pollution Control District.

California High Speed Rail

The California High Speed Rail Authority is currently in the process of developing a high-speed rail system that would provide passenger transportation and goods movement services throughout California with 800 miles of track and 24 stations. The first segment of the route will be between Bakersfield and Fresno. Through the EIR process, the preferred alignment and a station has been identified in Kings County.

This station will be the Kings/Tulare Regional Station and will be located near the City of Hanford (Kings County).

The purpose of the high speed rail system is to provide a reliable mode of travel that links the major metropolitan areas of the state and delivers predictable and consistent travel times. According to the Authority, high-speed rail is projected to carry approximately 100 million passengers annually by 2030.

Objectives

- T-O-14** Facilitate multi-modal freight access to maximize the range of use potential for large (40+ acres) industrial uses and developable parcels.
- T-O-15** Develop and maintain a coordinated mass transportation system that will encourage increased transit and rail use through convenient, safe, efficient, and cost-effective services.
- T-O-16** Provide a transportation system that effectively transports goods via trucks and rail with minimal disruption to residential areas.
- T-O-17** Support continued rail freight service in Tulare County.

Policies

- T-P-66** Prior to the approval of subdivision maps or development of identified properties in the Industrial Park, the City shall explore with the project applicant options for acquisition/dedication of right-of-way for freight rail spurs.
- T-P-67** Participate in the planning process for a potential Cross Valley Rail Line, which could provide east-west light rail service from Visa-

lia to Huron and potentially connect to a future High Speed Rail system.

- T-P-68** Evaluate the feasibility of a future local light rail system or bus rapid transit (BRT) system in Visalia, which could connect to Tulare to the south and points east and west.

The City should preserve right of way to support the preliminary light rail corridor or BRT system along Gosben Avenue, K Street, Santa Fe Street, and other roadways, as depicted on the Land Use diagram if either light rail or BRT is judged financially feasible.

- T-P-69** Support regional high-speed inter-city rail development and service. Should California High Speed Rail develop a station in Hanford (or elsewhere in Kings or Tulare County), work with the California High Speed Rail Authority to develop local connections coordinated with the train schedule.
- T-P-70** Support continued freight service in Tulare County, specifically development of freight rail service within close proximity to agricultural processing industries.
- T-P-71** Continue to participate in and advocate for collaborative efforts to improve railroad transportation facilities and reduce conflicts with the street system.

4.9 AVIATION

Visalia owns and operates the Visalia Municipal Airport (VIS). Located at the south east interchange of State Routes 198 and 99, VIS serves Tulare County, and eastern Kings County. The airport provides commuter airline and general aviation services. The airport has four fixed base operators (FBO) that provide a variety of services including instruction, charter, maintenance and corporate transport. The airport is home to over 150 based aircraft. Those aircraft, along with transient aircraft traffic, generate approximately 80,000 annual operations (take offs and landings). This includes commercial and non-commercial flights. Currently, the airport is primarily used for general aviation operations, including local and itinerant services. Other Airport activities include air taxi service and government operations.

Two passenger air services in the county are provided at the Visalia Municipal Airport. These services include daily non-stop flights from VIS to/from Los Angeles International Airport (LAX) and a daily one-stop flight to/from Las Vegas McCarran International Airport (LAS).

The current facility has one runway (6,559 feet) which is planned to be expanded to 8,000 feet. The airport consists of two parallel taxiways, 17 enclosed hangars, 113 T-hangars, two terminals, aviation fueling station. There are single-engine aircraft, multi-engine craft, jets and gliders based at the facility. In addition to office spaces, free parking is provided at the terminal. Visalia offers two fixed based operators that offer full service maintenance and repair. Two charter service operators are also located in Visalia. A flight school (Western Air) and charter services are also available.

Objectives

T-O-18 Promote the growth and use of the Visalia Municipal Airport to satisfy projected aviation demand for both commercial and non-commercial users.

Policies

T-P-72 Finance improvements to the Airport through user fees and State or federal funds earmarked for general aviation activities and other available financing mechanisms.

T-P-73 Continue to upgrade the service capacity of the Visalia Municipal Airport, as funding appropriations and revenues permit.

T-P-74 Maintain the airport's current and future functionality by limiting land uses and population densities surrounding the airport to those that are permitted under the Zoning Ordinance, as amended for consistency with this General Plan.



Rail right-of-way may allow opportunities to transition to passenger-carrying operations as a part of a regional light rail system (top).

Visalia Municipal Airport is primarily used for general aviation operations, while also providing passenger air service (bottom).

4.10 REGIONAL COORDINATION

The transportation system of a community is vital to its prosperity. Efficient circulation is important to the economic viability and the creation and preservation of a quality of life and the environment. The transportation system is also multi-modal, meaning that it provides numerous alternatives to the automobile; these other modes include transit, pedestrian facilities, bicycle facilities, rail facilities, airport facilities, etc., so that citizens and visitors can access and travel within the city using a number of transportation options to reduce vehicle trips and improve air quality.

The City of Visalia works with other cities, the Tulare County Association of Governments (TCAG), Caltrans and the federal government to assist in transportation planning efforts in the County of Tulare. TCAG and state and federal agencies work with the cities and communities in Tulare County to plan for and fund transportation improvements beneficial to all of its residents.

Objectives

- T-O-19** Ensure compatibility between circulation and transportation systems in Visalia and adjacent jurisdictions.
- T-O-20** Work with Caltrans to provide an efficient system for regional travel that minimizes impacts on local streets and arterials.
- T-O-21** Strive to minimize the effects of local travel on the regional highway system.

Policies

- T-P-75** Work with Caltrans to achieve timely construction of programmed freeway, State highway, and interchange improvements.
- T-P-76** Work with TCAG, the city of Tulare, and Caltrans to plan and develop State highway improvements between Visalia and Tulare for regional circulation, consistent with Caltrans' Transportation Concept Reports for individual state routes.
- T-P-77** Work with TCAG to ensure that the Regional Transportation Plan (RTP) and Sustainable Communities Strategy are consistent with Visalia's Land Use and Transportation policies.
- T-P-78** Work with the San Joaquin Valley Air Pollution Control District and TCAG to implement Transportation Control Measures identified in the RTP and air quality implementation plans.
- T-P-79** Update traffic study requirements, consistent with Policy T-P-18, to include analysis of impacts on the regional highway system and criteria for mitigation, consistent with this General Plan.