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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 Porterville'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.

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 tied together. 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 including the Airport environs. This Element also addresses landscaping along major streets and planning for new neighborhoods to ensure street connectivity. It also addresses how to create pedestrian-friendly environments and design for alternate modes. The Noise Element of the General Plan includes policies to alleviate noise generated by traffic.

4.1 GUIDING PRINCIPLES

Porterville's Circulation Element relies on 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 traffic engineering is used to bring planned improvements to reality.

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 of Porterville. The 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 a choice of routes and good connections between and within neighborhoods. Short blocks offer more frequent pedestrian and bike 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.

Some more recently developed neighborhoods in Porterville have been built using cul-de-sacs. This type of design promotes circuitous travel and results in traffic being distributed along fewer streets where heavy traffic concentrates. Grid-based development is more desirable because it balances a sense of proximity and ease of access with the quieter environments of neighborhoods. 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 be "connected" to the surroundings with an increased number of access points and pedestrian and bicycle connections to the neighborhood network;
- Blocks be short to allow for more direct connections;
- Neighborhood streets be designed at a human-scale, without excessively wide streets; and
- Traffic controls are incorporated including speed limits, bulb outs, 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 on traffic 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. Allowing market-driven development without regard to use mix, dispersion, and connections with the transportation system will not be sufficient to support the pedestrian-oriented development or maintain the “small-town” atmosphere Porterville desires. Careful integration of land use and transportation and attention to the design and location of pedestrian and bicycle networks, the design of linkages, the location of parking, and provisions for local transit will be essential. 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, Porterville will encourage physical activity and reduce auto-dependency.



Downtown streetscape improvements will support pedestrian activity.

4.2 OVERALL CIRCULATION SYSTEM PLANNING

Citywide policies that will guide overall circulation system planning emphasize the need to consider all modes, not just automobile circulation. Implementation actions will support the overall objective of having a multi-modal transportation system.

GUIDING POLICIES

- C-G-1 *Promote safe and efficient vehicular circulation.*
- C-G-2 *Provide a wide variety of transportation alternatives and modes to service all residents and businesses to enhance the quality of life.*
- C-G-3 *Make efficient use of existing transportation facilities and, through coordinated land use planning, strive to improve accessibility to shops, schools, parks and employment centers and reduce total vehicle miles traveled per household to minimize vehicle emissions and save energy.*
- C-G-4 *Protect neighborhoods by discouraging through-traffic on local streets.*
- C-G-5 *Improve the scenic character of transportation corridors in the City.*

IMPLEMENTING POLICIES

- C-I-1 Adopt street standards that provide flexibility in design, especially in residential neighborhoods. Revise right-of-way and pavement standards to reflect adjacent land use and/or anticipated traffic, and permit reduced right-of-way dimensions where necessary to maintain neighborhood character.
- C-I-2 Require all new developments to provide right-of-way and improvements consistent with the General Plan street designations and City street section standards.
- This may include frontage roads adjacent to State highways, where needed.*
- C-I-3 Provide for greater street connectivity by:
- Incorporating in subdivision regulations requirements for a minimum number of access points to existing local or collector streets for each development;
 - Encouraging roundabouts over signals, where feasible and appropriate;
 - Requiring the bicycle and pedestrian connections from cul-de-sacs to nearby public areas and main streets; and
 - Requiring new 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 these stubs.
- C-I-4 Develop a multi-modal transit system map integrating bicycle, public transportation, pedestrian and vehicle linkages within the City to ensure circulation gaps are being met.
- The City has a Transit Service Map that is updated regularly and can be used as the base for implementing this policy.*
- C-I-5 Install traffic calming devices, such as signage and bulbs, as needed and appropriate in existing neighborhoods.
- C-I-6 Require the installation of landscaping in center medians and at major intersections to minimize summer heat and enhance the character of the streetscapes.
- For small-lot subdivisions (with an average lot size of 6,000 square feet or less), the planter strip for a local street may be omitted if:*
- *A five-foot sidewalk is provided on both sides of the street and trees are provided in the front yards of private lots parallel with the sidewalk at the minimum frequency required for street trees; and/or*
 - *Street trees are provided in landscaped bulb-outs into the parking lane at intersections.*

Alternatively, where a planter strip is provided along a local street, the front setback for buildings may be reduced an additional two feet from the normally required setback.

C-I-7 Require street tree planting as part of an urban forestry program.

4.3 ROADWAY NETWORK

In Porterville, 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 the western portions of the City. While state routes 190 and 65 provide regional east/west and north/south access respectively, these large arterials create lineal barriers to connectivity. In addition, the Tule River constrains local north/south access to approximately ten bridges.

FUNCTIONAL STREET CLASSIFICATIONS

Porterville's roadway system is set up around a hierarchy of street types, which are commonly referred to as functional classifications. The functional classifications for most major streets are illustrated on Figure 4-1 and are defined as follows:

Freeways. Freeways serve regional and inter-city travel and should not become the optimum route for intra-city trips. Access is controlled, grade crossings are separated, and medians separate lanes moving in opposite directions. Typical free flow speeds exceed 55 miles per hour.

Highways. Highways are designed to carry heavy traffic volumes and should serve longer distance intra-city travel as well as linking the City with other nearby urban areas. Access is limited, crossings are generally signalized at grade, parking is not allowed, and a continuous median separates lanes moving in opposite directions. State routes 65 and 190 are regional State Highways, with portions designated as freeways.

Arterials. Arterials are designed to move large volumes of traffic between freeways/highways and other arterials in Porterville and to adjacent jurisdictions. Major arterials are four- or six-lane, access-controlled roadways emphasizing mobility between major portions of the city and to regional freeways and highways. On-street parking may be restricted on major arterials to maintain traffic levels of service. Major east-west arterials will be Reid, Henderson, Morton, Olive, and Teapot Dome avenues. Westwood, Newcomb, Prospect, Indiana, Jaye, Main, Plano and Hillcrest streets will provide major north-south access.

Minor arterials provide mobility through the city and access to major residential, employment, and activity centers. Minor arterials provide two travel lanes. Driveway access should be minimized, consistent with the primary function of arterials to move through traffic. Bike lanes, landscaped parkstrips, sidewalks, and transit facilities may also be accommodated within the right-of-way of minor arterials. Westfield Avenue and portions of Teapot Dome Avenue will serve as minor east-west arterials, while Doyle Street and the southern portion of Main Street will be minor north-south arterials.

Parkways. Parkways provide an attractive, limited access link between residential communities and commercial centers. Parkways are tree-lined with landscaped medians and four travel

lanes. Sidewalks and transit facilities may be provided. Curbs should be provided with limited curb cuts. On-street parking should not be provided. New parkways will be constructed along the foothills and around Rocky Hill.

Collectors. Collector streets provide a link between neighborhood streets and arterials. Collectors provide two travel lanes and bike lanes. On-street parking may be provided if sufficient width is available. Collectors also provide access to adjacent properties, so driveway access should be discouraged but need not be restricted (subject to accepted engineering practice). Bike lanes, landscaped parkstrips, sidewalks, and transit facilities may also be accommodated.

Local Streets. The primary function of local streets is to provide direct access to adjacent properties. Neighborhood streets should provide two travel lanes, landscaped parkstrips, and sidewalks. On-street parking may be regulated. Bike lanes are usually not needed because neighborhood streets carry low traffic volumes and all neighborhood streets are considered to be bicycle friendly. Neighborhood streets are not shown on the General Plan Land Use Diagram or Figure 4-1: 2030 Circulation Network.



New neighborhood streets will have two travel lanes, landscaped parkstrips, and sidewalks.

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 ratings 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: Level of Service Definitions

LOS	Description	Max. Volume/ Capacity Ratio
A	<i>Free Flow or Insignificant Delays:</i> Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Control delay at signalized intersections is minimal.	0.6
B	<i>Stable Operation or Minimal Delays:</i> The ability to maneuver within the traffic stream is only slightly restricted, and control delay at signalized intersections are not significant.	0.7
C	<i>Stable Operation or Acceptable Delays:</i> The ability to maneuver and change lanes is somewhat restricted, and average travel speeds may be about 50 percent of the free flow speed.	0.8
D	<i>Approaching Unstable or Tolerable Delays:</i> Small increases in flow may cause substantial increases in delay and decreases in travel speed.	0.9
E	<i>Unstable Operation or Significant Delays:</i> Significant delays may occur and average travel speeds may be 33 percent or less of the free flow speed.	1.0
F	<i>Forced Flow or Excessive Delays:</i> Congestion, high delays, and extensive queuing occur at critical signalized intersections with urban street flow at extremely low speeds.	>1.0

Source: Highway Capacity Manual, Transportation Research Board, Washington D.C, 2000.

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
2-Lane Rural Highway	2,400	4,800	7,900	13,500	22,900
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

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. Omni-Means, 2005.

EXISTING TRAFFIC CONDITIONS

Traffic conditions, based on traffic counts conducted in October 2005, for 23 road segments in Porterville are shown in Table 4-3. Additional traffic counts were obtained from Caltrans and subsequent studies.

Based on the roadway LOS thresholds, all the study roadway segments operate at an acceptable LOS except for Date Avenue, which is operating at LOS F, and Prospect Street between Morton and Grand avenues, which is operating at LOS E. The existing collector street cannot accommodate the high traffic volume of approximately 12,710 vehicles per day.



New parkways will be constructed along the foothills and around Rocky Hill.

Table 4-3: Daily Roadway Segment Operations – 2005

<i>Roadway Segment</i>	<i>Limits</i>	<i>Lanes</i>	<i>Facility Type</i>	<i>AADT</i>	<i>LOS</i>
SR 65	SR 190 - Westfield Ave.	4	Divided Freeway	25,000	A
SR 65	Westfield Ave. - Linda Vista Ave.	4	Divided Freeway	19,800	A
SR 190	Road 192 - SR 65	2	Arterial	5,700	A
SR 190	SR 65 - Jaye St.	4	Divided Arterial	24,100	B
SR 190	Jaye St. - Main St.	4	Divided Arterial	20,500	A
SR 190	Main St. - Plano St.	4	Divided Arterial	18,900	A
SR 190	Plano St. - Road 265	4	Divided Arterial	10,900	A
SR 190	Road 265 - Road 284	2	Arterial	8,000	A
SR 190	Road 284 - Success Valley Dr.	2	Arterial	6,300	A
Date Ave.	Plano St. - Park St.	2	Collector	12,710	F
Main St.	North Grand Ave. - Linda Vista Ave.	2	Arterial	7,490	A
Main St.	Pioneer Ave. - Reid Ave.	2	Arterial	8,210	A
Morton Ave.	Plano St. - Larson St.	4	Divided Arterial	6,590	A
Morton Ave.	Crestview St. - Hillcrest St.	4	Undivided Arterial	2,700	A
Newcomb St.	Scranton Ave. - SR 190	2	Arterial	1,080	A
Olive Ave.	A St. - Plano St.	4	Divided Arterial	7,580	A
Plano St.	Henderson Ave. - Prosperity Cir	2	Collector	5,230	A
Plano St.	Westfield Ave. - Reid Ave.	2	Collector	2,730	A
Prospect St.	Morton Ave. - Grand Ave.	2	Collector	11,130	E
Prospect St.	Glenn Court - Pioneer Ave.	2	Collector	5,260	A
Putnam Ave.	Plano St. - Esther St.	2	Collector	6,960	B
Westfield Ave.	Prospect St. - Maston St.	2	Local St.	8,030	C
Westwood St.	Roby Ave. - Olive Ave	2	Local St.	6,560	B

Source: Omni-Means, 2005.

4.4 PLANNED IMPROVEMENTS

To achieve a balance between existing and future land use and traffic carrying capacity, improvements to the roadway network will be needed. Major street improvements planned for Porterville are listed in Table 4-4. These improvements include widening portions of SR 65 and other major arterials, new bridge crossings, interchange improvements and grade separations. A few new arterial roads will need to be constructed as well as numerous collector and residential streets in the targeted growth areas.

- As part of developing the area near Lake Success, a new parkway, Hillcrest Parkway will extend from Hillcrest Street over the Rocky Hill area to Lake Success. The road will approximately follow the lakeshore, as Lake Success Parkway, to connect with Road 284/Reservation Road.
- A new parkway, Foothill Parkway, will follow the foothills, linking new neighborhoods and potential college sites between Reid Avenue and Road 284/Reservation Road and SR 190.
- A third parkway, Teapot Dome Parkway, will extend from Teapot Dome Avenue along the southeastern foothills to Road 284/Reservation Road. This is designed to provide access from new residential neighborhoods to the major employment center near the airport, as well as provide alternative access to SR 190 or SR 65.

The future circulation network is illustrated in Figure 4-1. The proposed roads are conceptual, subject to further engineering and environmental review. No General Plan amendment is required if the general location, anticipated level of service, and connections to the street network are maintained.

The typical street widths and design elements listed in Table 4-5 are illustrated in Figure 4-2. 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. These sections assume 11-foot travel lanes.

Table 4-4: Major Planned Street Improvements

<i>Roadway Segments</i>	<i>Improvement</i>
Gibbons Ave: Indiana St - Jaye St	Widen to 4-lane Arterial
Henderson Ave: Friant-Kern Canal - Newcomb St	Complete 4-lane Arterial
Henderson Ave: Prospect St - Indiana St	Widen to 6-lane Major Arterial
Hillcrest St: Teapot Dome Ave - Morton Ave	Complete 4-lane Arterial, new bridge
Indiana Ave: Ave 128 – Westfield Ave	Complete 4 lane Arterial, new bridge
Jaye St: Springville Dr - Olive Ave	Complete 4-lane Arterial
Jaye St: SR 190 - Springville Dr	Widen to 6-lane Arterial
Jaye St: Gibbons Ave – SR 190	Widen to 4-lane Arterial
Main St: Henderson Ave - Ave 181	Widen to 4-lane Arterial
Newcomb St: Pioneer Ave - North Grand Ave	Widen to 4-lane Arterial
Newcomb St: Teapot Dome Ave - Olive Ave	Complete 4-lane Arterial, new bridge
North Grand Ave/Reid Ave: SR 65 - Plano St	Widen to 4-lane Arterial
North Grand Ave: Prospect St - SR 65	Widen to 4-lane Arterial
Olive Ave: Friant-Kern Canal - Westwood St	Widen to 4-lane Arterial
Olive Ave: Prospect St - Indiana St	Widen to 6-lane Major Arterial
Plano St: Henderson Ave - Reid Ave	Complete 4-lane Arterial
Plano St: Scranton Ave - SR 190	Widen to 4-lane Arterial
Prospect St: Mulberry Ave - Westfield Ave	Widen to 4-lane Arterial
Scranton Ave: SR 65 - Indiana St	Widen to 4-lane Arterial
Springville Dr: Indiana St - East of Jaye St	Widen to 4-lane Arterial
SR 65: S. City Limits - SR 190	Widen to 4-lane expressway/freeway
Teapot Dome Ave: Newcomb St - S. Main St	Widen to 4-lane Arterial
Westwood St: Henderson Ave - Friant-Kern Canal	Widen to 4-lane Arterial
Westwood St: SR 190 - Olive Ave	Widen to 4-lane Arterial
<i>New Major Roads</i>	
Foothill Parkway: Reid to Road 284	Lake Success Parkway: Hillcrest Parkway to Road 284
Hillcrest Parkway (Extension): Foothill Parkway to Ave 176	Teapot Dome Parkway (Extension): Hillcrest St to Road 284
Mentz Avenue Extension: Newcomb - Hillcrest	
<i>SR 65 Interchange Improvements</i>	<i>SR 65 Grade Separations</i>
Avenue 181 (new)	Westfield Ave
Olive Ave (exists)	Morton Ave
Teapot Dome Ave (new)	Scranton Ave
North Grand Ave (new)	
Henderson Ave (exists)	
<i>SR 190 Interchange Improvements</i>	<i>SR 190 Grade Separations</i>
Westwood St (new)	Newcomb St
Main St (existing)	Plano St
Hillcrest St (new)	Indiana St
Road 284 (new)	

Source: City of Porterville; Omni-Means, 2007; Dyett & Bhatia, 2007.

Figure 4-1
2030 Circulation Network

- State Highway
- Major Arterial (6 lanes)
- Major Arterial (4 lanes)
- Parkway
- Minor Arterial (2 lanes)
- Collector
- Potential Interchange Improvements
- Grade Separation
- New Bridge
- Other Road
- Planning Area

Note: Proposed roads are conceptual, subject to further engineering and environmental review.

Source: Dyett & Bhatia; Omni Means; 2007

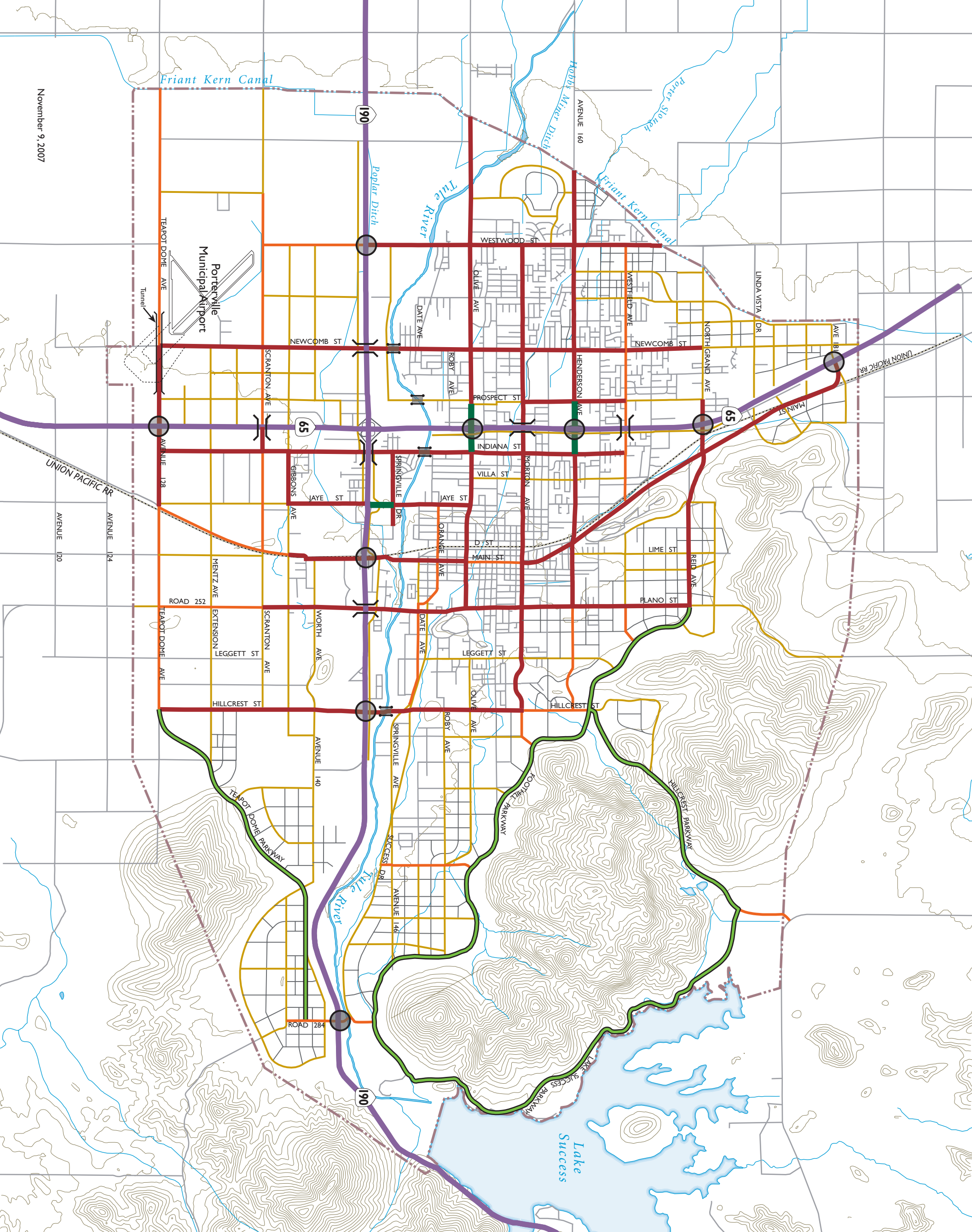
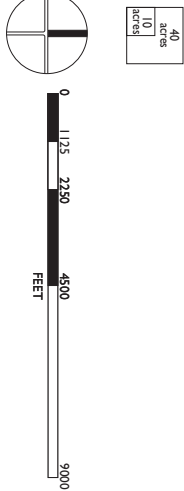


FIGURE 4-2A: MAJOR ARTERIAL (4 LANES)

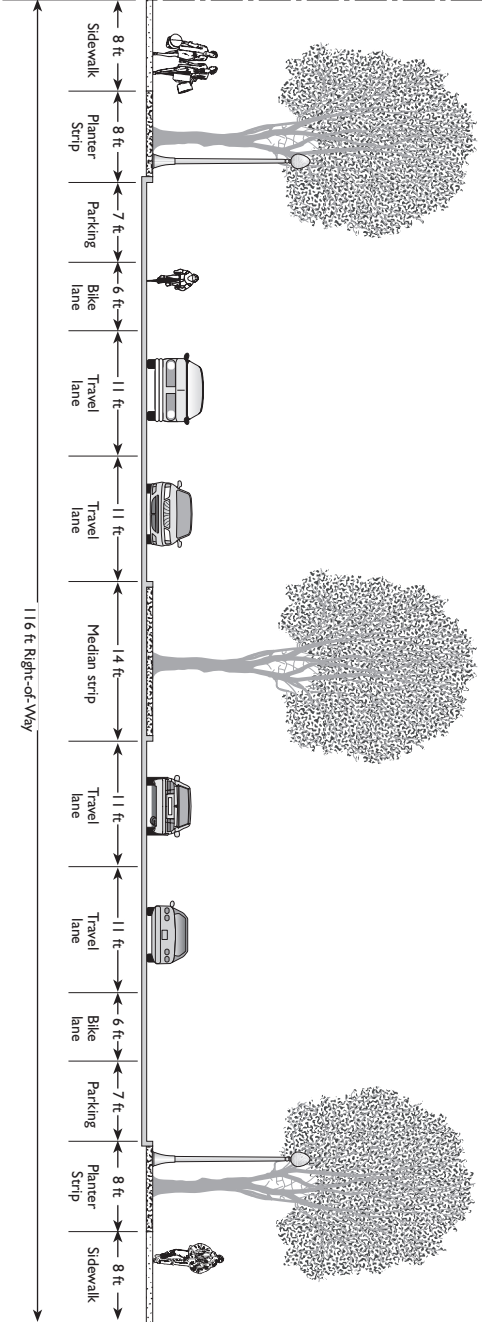


FIGURE 4-2D: COLLECTOR - WITHOUT ON-STREET PARKING

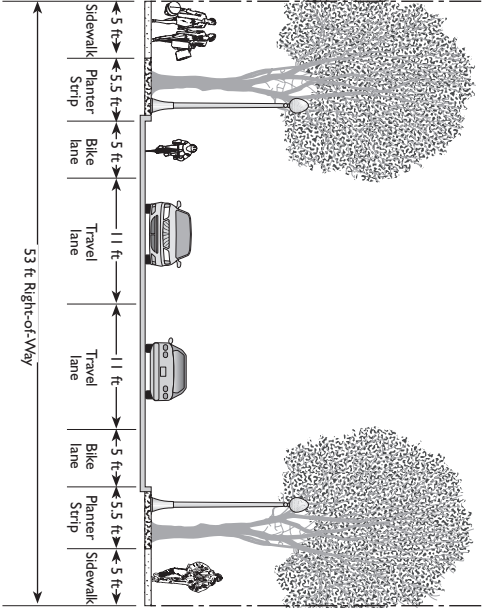


Figure 4-2
Typical Street Sections

Note: These street cross sections are illustrative and conceptual. The actual roadway configurations are subject to comprehensive engineering and design.

FIGURE 4-2B: MINOR ARTERIAL (2 LANES)

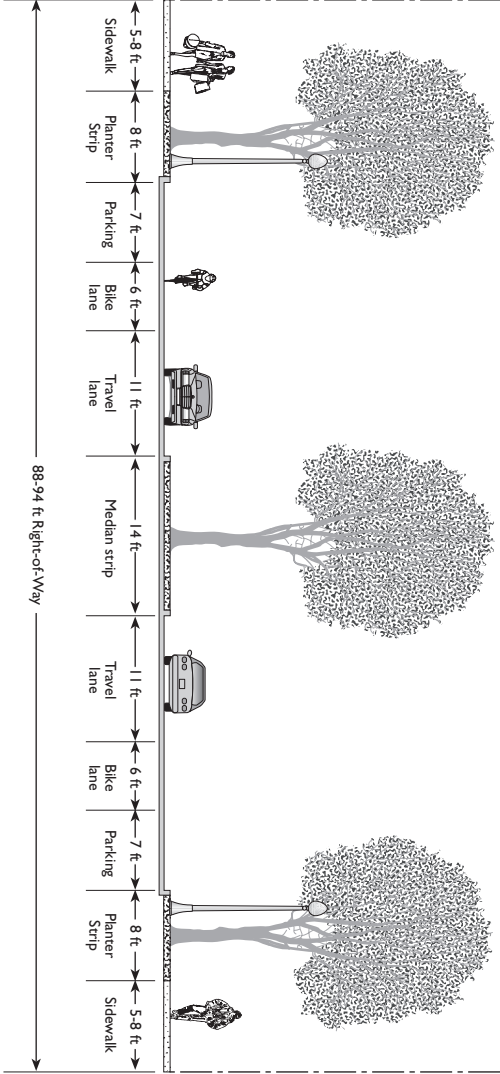


FIGURE 4-2E: COLLECTOR - WITH MEDIAN STRIP AND WITHOUT ON-STREET PARKING

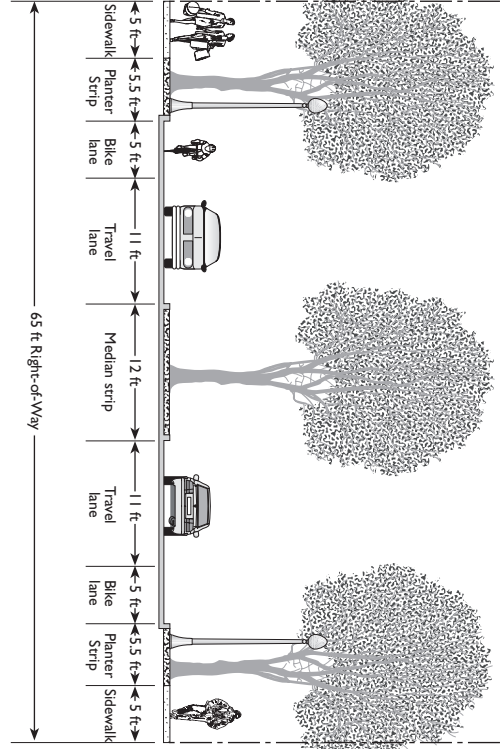


FIGURE 4-2G: LOCAL RESIDENTIAL STREET

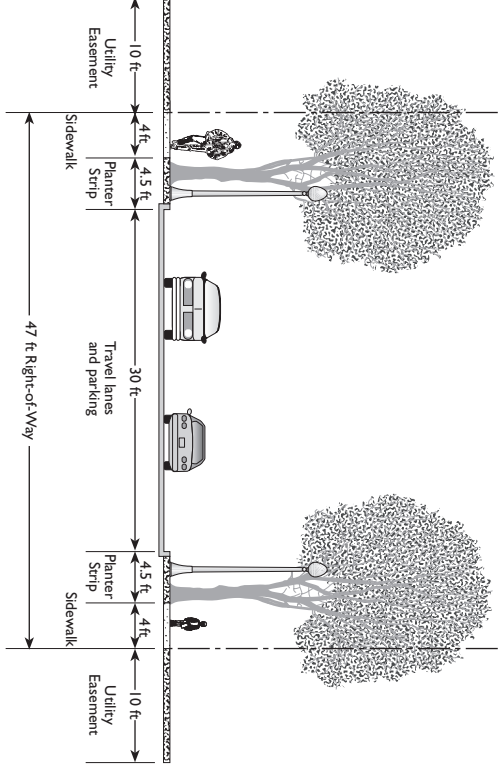


FIGURE 4-2C: PARKWAY (WITH ON-STREET BIKE LANES)

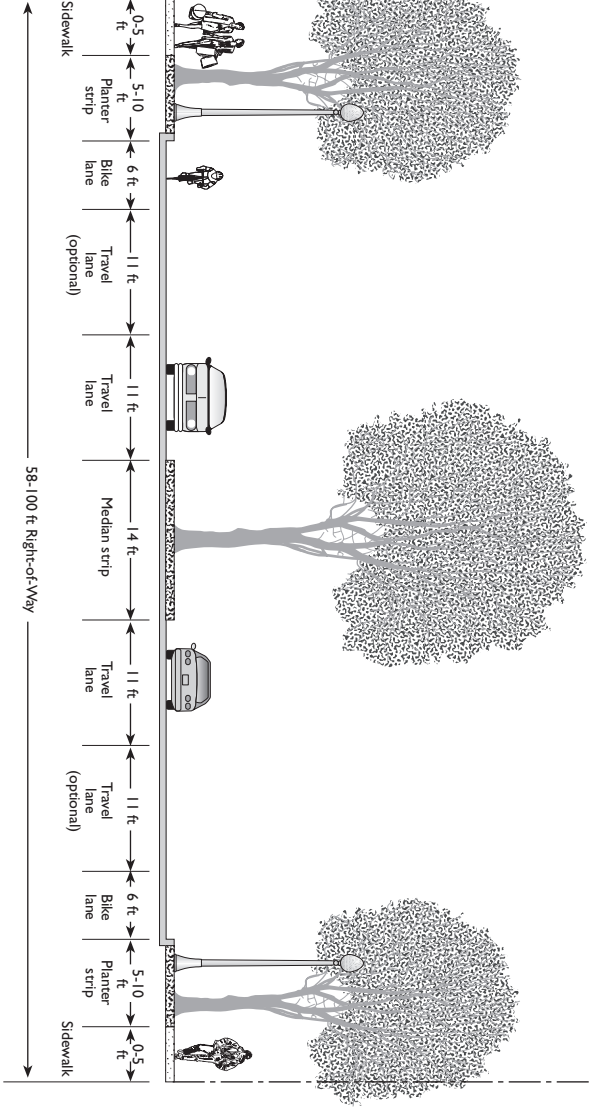


FIGURE 4-2F: COLLECTOR - WITH ON-STREET PARKING

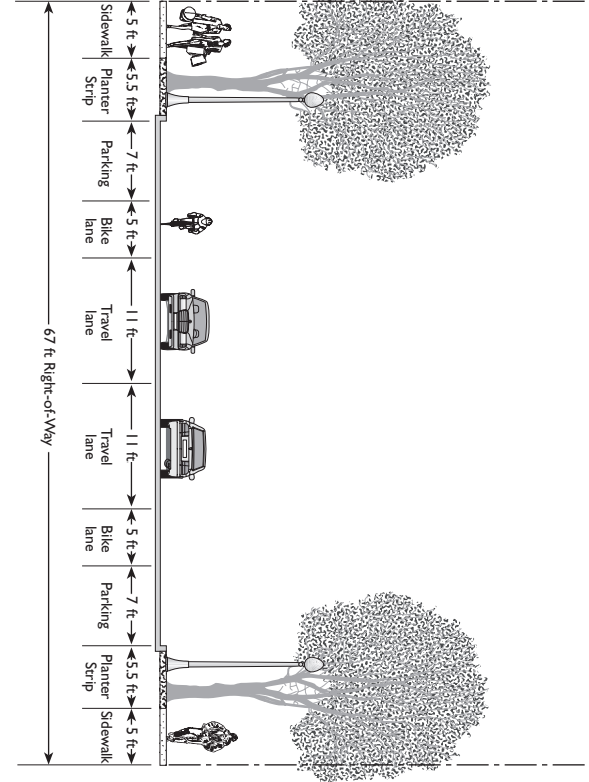


FIGURE 4-2H: LOCAL COMMERCIAL STREET

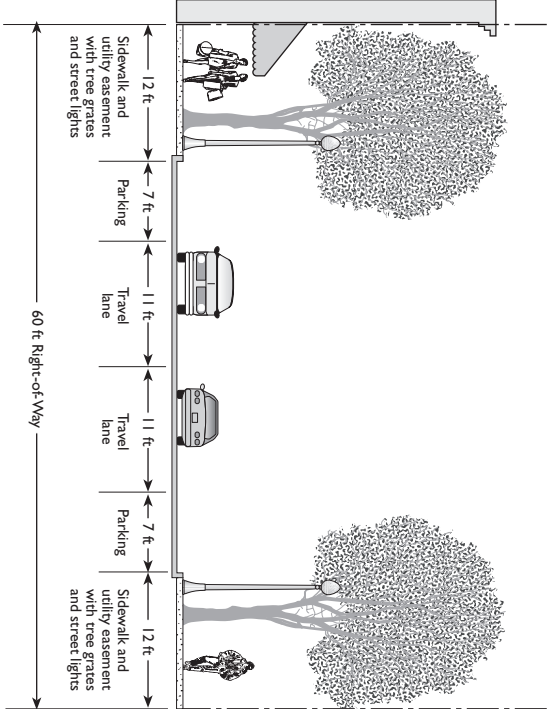


Table 4-5: Typical Street Elements and Widths (Feet)

Street Classification	Right-of-Way Width	Curb-to-Curb Width	Travel Lanes: Number	Parking Lanes: Number	Bicycle Lanes: (each side)	Median Strip	Planter Strip (each side) ¹	Sidewalks (each side)
Major Arterial	116	84	4	2	6	14	8	8
Minor Arterial	88-94	62	2	2	6	14	8	5 - 8 ²
Parkway	Varies	Varies	2 - 4	None	6	Varies	5 - 10	0 - 5
Collector: without on-street parking	53	32	2	None	5	None	5.5	5
Collector: with median and without on-street parking	65	44	2	None	5	12	5.5	5
Collector: with on-street parking	67	46	2	2	5	None	5.5	5
Local Residential Street	47	30	Parking lanes on each side, and one shared central travel lane.		None	None	4.5	4
Local Commercial Street	60	36	2	2	None	None	12, combined width of sidewalks and planter strip.	
Cul-de-sac or Other Dead-End Street Serving Less than 10 Homes	47	30 – 41	2	2	None	5, as alternative to planter strip	4.5, or option to substitute median strip	4

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

2. In residential areas, the narrower sidewalk may be appropriate.

Source: Dyett & Bhatia, 2007.

FUTURE TRAFFIC CONDITIONS

The traffic model predicts that by making the planned improvements the Porterville Planning Area will generate approximately 2,150,000 vehicle miles traveled (VMT) or approximately 21 miles per person per day. In addition, only SR 190 between SR 65 and Plano Street will be operating below the LOS standards of this Plan. Plus, one of the new collector roads to be built between Newcomb Street and SR 65 will be operating at the General Plan minimum standard, LOS D.

Table 4-6: Daily Roadway Segment Operations - 2030 Buildout

<i>Roadway Segment</i>	<i>Lanes</i>	<i>Type</i>	<i>AADT</i>	<i>LOS</i>
Avenue 128: Newcomb St - SR 65	4	Major Arterial	5,120	B
Avenue 128: SR 65 - Main St	4	Major Arterial	7,530	B
Henderson Ave: Westwood St - Prospect St	4	Major Arterial	18,610	B
Henderson Ave: Prospect St - Indiana St	6	Major Arterial	28,110	B
Henderson Ave: Indiana St - Main St	4	Major Arterial	19,210	B
Hillcrest St: Worth Ave - SR 190	4	Major Arterial	4,880	B
Hillcrest St: SR 190 - Roby Ave	4	Major Arterial	12,680	B
Hillcrest Pkwy: Foothill Pkwy - Avenue 176	2	Parkway	9,810	C
Indiana St: SR 190 - Olive Ave	2	Minor Arterial	1,520	B
Indiana St: Olive Ave - Westfield St	4	Major Arterial	2,930	A
Jaye St: Teapot Dome Ave - SR 190	2	Collector	9,310	C
Jaye St: SR 190 - Date Ave	6	Major Arterial		
Jaye St: Date Ave – Olive Ave	4	Major Arterial	21,760	B
Main St: Gibbons Ave - SR 190	4	Major Arterial	5,890	B
Main St: SR 190 - Olive Ave	4	Major Arterial	7,390	B
Main St: Olive Ave – Morton Ave	2	Arterial	8,430	A
Main St: Morton Ave - Westfield Ave	4	Major Arterial	21,680	B
Main St: Westfield Ave - Linda Vista Ave	4	Major Arterial	19,620	B
Morton Ave: Westwood St - SR 65	4	Major Arterial	5,390	B
Morton Ave: SR 65 - Main St	4	Major Arterial	5,250	B
Morton Ave: Plano St - Hillcrest St	4	Major Arterial	13,460	C
Mentz Ave Extension: Newcomb St - SR 65	2	Collector	14,480	D
Mentz Ave Extension: SR 65 - Jaye Street	2	Collector	5,160	C
Foothill Pkwy: Morton Ave - Road 284	2	Parkway	9,370	C
Newcomb St: Scranton Ave - SR 190	4	Major Arterial	15,940	B
Newcomb St: SR 190 - Henderson Ave	4	Major Arterial	12,750	B
Olive Ave: Westwood St - Prospect St	4	Major Arterial	22,300	B
Olive Ave: Prospect St - Indiana St	6	Major Arterial	30,520	B
Olive Ave: Indiana St - Main St	4	Major Arterial	20,750	B
Plano St: Scranton Ave - SR 190	4	Major Arterial	14,500	B
Plano St: SR 190 - Morton Ave	4	Major Arterial	21,350	B
Plano St: Morton Ave - Reid Ave	4	Major Arterial	14,500	B
Prospect St: Morton Ave - Westfield St	4	Major Arterial	12,760	B
Reid Ave: SR 65 - Plano St	4	Major Arterial	12,520	B
Road 284: SR 190 - Reservation Rd	2	Minor Arterial	8,480	C
Scranton Ave: Newcomb St - SR 65	2	Collector	4,070	B
Scranton Ave: SR 65 - Jaye St	2	Collector	8,260	C

Table 4-6: Daily Roadway Segment Operations - 2030 Buildout

Roadway Segment	Lanes	Type	AADT	LOS
Springville Ave: Indiana St - Jaye St	4	Major Arterial	1,460	A
Springville Ave: Hillcrest St - Doyle St	2	Collector	6,470	C
SR 190: Westwood St - SR 65	4	State Highway	21,820	B
SR 190: SR 65 - Plano St	4	State Highway	37,540	F
SR 190: Reservation Rd - Success Valley Dr	4	State Highway	14,630	B
SR 65: Teapot Dome Ave - SR 190	4	State Highway	34,486	B
SR 65: SR 190 - Henderson Ave	4	State Highway	43,990	C
SR 65: Henderson Ave - North Grand Ave	4	State Highway	38,570	B
Teapot Dome Pkwy: Hillcrest St - Reservation Rd	2	Parkway	2,510	B
Westwood St: Scranton Ave - SR 190	2	Minor Arterial	1,110	B
Westwood St: SR 190 - Morton Ave	4	Major Arterial	9,550	B
Westwood St: Morton Ave - Westfield Ave	4	Major Arterial	11,080	B

Source: Omni-Means, 2007.

GUIDING POLICIES

Traffic Level of Service (LOS)

C-G-6 *Maintain acceptable levels of service and ensure that future development and the circulation system are in balance.*

Funding for Improvements

C-G-7 *Ensure that new development pays its fair share of the costs of transportation facilities.*

IMPLEMENTING POLICIES

Traffic Level of Service (LOS)

C-I-8 Develop and manage the roadway system to obtain LOS D or better during the peak hour for all major roadways and intersections in the City. This policy does not extend to residential streets (i.e., streets with direct driveway access to homes) or state highways and their intersections, where Caltrans policies apply. Exceptions to LOS D policy may be allowed by the City Council in areas such as downtown and at highway interchanges, where allowing a lower LOS would result in clear public benefits.

No new development will be approved unless it can be shown that required level of service can be maintained on the affected roadways or there are specific benefits that justify accepting a lower level of service.

- C-I-9 Develop and manage local residential streets (i.e., streets with direct driveway access to homes) to limit average daily vehicle traffic volumes to 2,500 or less and 85th percentile speeds to 25 miles per hour or less.

Neighborhood traffic control measures to be considered include: regulatory devices, such as right-of-way controls, speed limits, and parking regulations; as well as geometric fixtures such as roundabouts, semi-diverters, and diagonal diverters.

- C-I-10 Require traffic impact studies for all General Plan amendments that will generate more than 100 peak hour trips.

Exceptions may be granted where traffic studies have been completed for adjacent development. The City's new traffic model developed for the 2030 General Plan will facilitate this analysis.

- C-I-11 Establish and implement additional programs to maintain adequate levels of service at intersections and along roadway segments as circumstances warrant, including the following actions:

- Collect and analyze traffic volume data on a regular basis and monitor current intersection and roadway segment levels of service on a regular basis. Use this information to update and refine the City's travel forecasting model so that estimates of future conditions are more strongly based upon local travel behavior and trends.
- Consider, on a case by case basis, how to shift travel demand away from the peak period, especially in those situations where peak traffic problems result from a few major generators (e.g., major new retail development in the highway corridors).
- Perform periodic evaluations of the efficiency of the City's traffic control system, with emphasis on traffic signal timing, phasing and coordination to optimize traffic flow along arterial corridors.

Funding for Improvements

- C-I-12 Continue to require that new development pay a fair share of the costs of street and other traffic and local transportation improvements based on traffic generated and impacts on traffic service levels.

- C-I-13 Use city-wide traffic impact fees to provide additional funding for transportation improvements needed to serve new development.

- C-I-14 Require new development that will have an impact on regional transportation facilities to pay a regional transportation impact fee.

A two-tier system will generate funds not only for the City street system but also for any needed improvements to the State highway facilities that are needed to serve new development. These fees would be set on a "fair share" basis.

4.5 PUBLIC TRANSIT

Bus public transit is provided by Porterville Transit and Tulare County Area Transit. Porterville Transit is the municipal public transit operator and is managed by Sierra Management for the City of Porterville. The local transit system consists of seven fixed-routes that run Monday through Friday, 7 a.m. to 7 p.m. and Saturday, 9 a.m. to 5 p.m. and a demand-response “Dial-a-Ride” service called Porterville COLT (City Owned Local Transit). There is no bus service on Sunday. The frequency between buses during both peak and off-peak hours of operation is approximately every 30 minutes.

The 2006 Short Range Transit Plan (SRTP) estimates annual bus ridership to be approximately 450,000 and 27,500 for the demand-response service. This represents a per capita trip rate of 9.9 on the buses and 0.6 on the demand-response service. The dramatic decrease in ridership on the demand-response system is because it restricted service to seniors and persons with disabilities in 2006. The SRTP uses a range of per capita trip rates to estimate future transit demand, as shown in Table 4-7.

Table 4-7: Current and Future Local Transit Ridership

Year	Bus Ridership	Per capita trip rate	COLT Ridership	Per capita trip rate
2006	451,046	10.1	58,611	1.3
2007	449,538	9.9	27,477 ¹	0.6
2030 (Low)	671,698	6.3	35,409	0.3
2030 (High)	1,158,840	10.8	96,570	0.9

¹ In 2006, Porterville COLT restricted its service to only seniors and persons with disabilities.

Source: City of Porterville, Short Range Transit Plan, 2006. Linda Clark, City of Porterville. July 12, 2007.

The Porterville Transit Center is located on “D” Street at Oak Avenue and serves as the transfer node for each of the seven bus routes. This fixed transfer point provides increased connectivity between bus routes.

Tulare County Area Transit provides regional bus service from the City of Porterville to surrounding communities via five routes. Tulare County Area Transit provides bus service Monday through Saturday.

GUIDING POLICY

C-G-8 *Promote the use of public transit for daily trips to schools and work and for other purposes.*

IMPLEMENTING POLICIES

C-I-15 Situate transit stops and hubs at locations that are convenient for transit users, and promote increased transit ridership through the provision of shelters, benches, bike racks on buses, and other amenities.

- C-I-16 Ensure that new development is designed to make transit a viable choice for residents. Design options include:
- Have neighborhood focal points with sheltered bus stops;
 - Locate medium-high density development whenever feasible near streets served by transit; and
 - Link neighborhoods to bus stops by continuous sidewalks or pedestrian paths.

4.6 BICYCLES, TRAILS AND PEDESTRIAN CIRCULATION

Bicycling and walking are inexpensive, energy conserving, and non-polluting modes of transportation. Porterville’s typically 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 SR 190 and SR 65.

BIKEWAYS/TRAILS

Porterville has recently completed eight miles of bikeway segments and eleven bike parking facilities, however few of the segments are linked. The City is in the process of developing a Class 1 Tule River Parkway bicycle and pedestrian path and a Class 1 rails-to-trails path along the abandoned Tulare Valley Railroad Corridor. The first two phases of the Tule River Parkway between Main Street and SR 65 are complete. The Rails-to-Trails project will run from the Tule River Parkway to Mulberry Avenue. An on-street connection is planned to link the two pathways using Plano Street. Additional bikeways, particularly to and from Lake Success and along the new Foothill Boulevard should encourage recreational biking. New intra-city bikeways will support bicycling commuting to employment and commercial centers.



Rails-To-Trails project will reuse abandoned rail right-of-way.

A “Class I” bikeway, also referred to as a bike path or multi-use trail, is a right-of-way that is completely separated from any street. A “Class II” bikeway, or bike lane, is a one-way, striped, and signed lane on a street or highway. A “Class III” bike route shares the road with pedestrians and motor vehicle traffic and is marked only by signs. The existing bikeway miles are shown in Table 4-8.

Table 4-8: Existing Bikeways (miles)

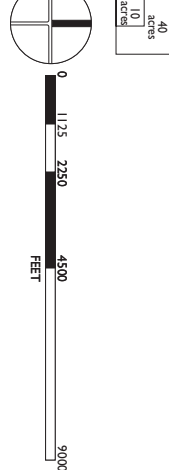
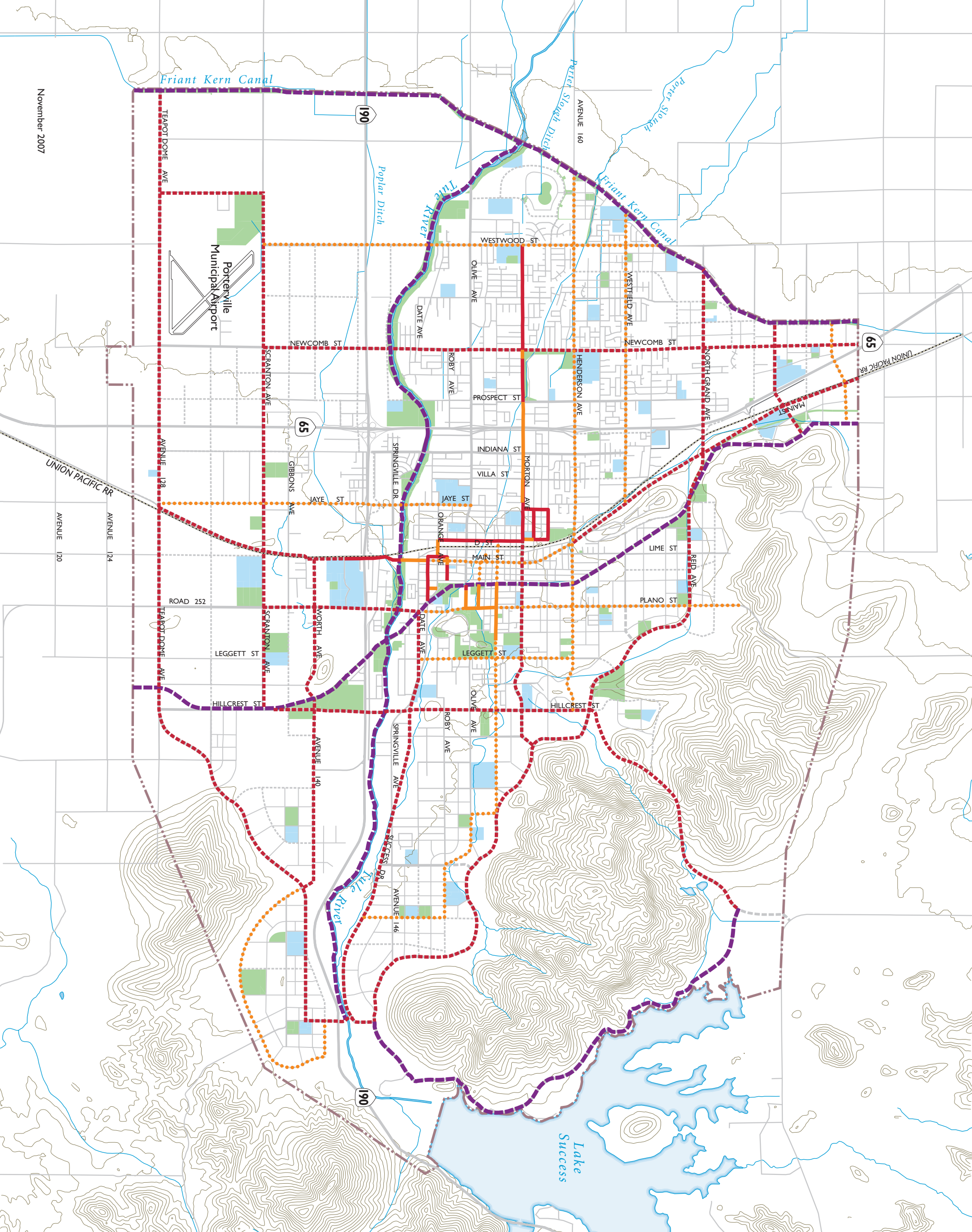
<i>Class I</i>	<i>Class II</i>	<i>Class III</i>
0.2	5.0	3.0

Source: City of Porterville.

Figure 4-3
Bikeways Network

- Existing Class I
- Existing Class II
- Existing Class III
- Proposed Class I
- Proposed Class II
- Proposed Class III
- Education
- Park
- Planning Area

Source: Dyett & Bhatia; City of Porterville, 2007



Bicycle Transportation Plan

In addition to the bikeway improvements already made by the City, the 2002 Tulare County Association of Governments (TCAG) *Bicycle Transportation Plan* identifies 110.5 miles of existing and proposed bikeways in the Porterville area. These improvements are intended to complete a regional network. This plan is currently being updated.

Table 4-9: Proposed TCAG Projects in Porterville Area

<i>Name/Classification</i>	<i>From</i>	<i>To</i>	<i>Miles</i>
Class I			
Tule River Bike Path	Road 224	Success Lake	10
San Joaquin Valley Railroad Bike Path	Porterville	Lindsay	10.5
Main Street Bike Path	North City Limit	Avenue 128	6.5
Class II or III			
SR 65/Road 196	Avenue 344	Teapot Dome Ave.	45
Porterville to Springville (Ave. 144, SR 190)	State Route 65	Springville	16.5
Class II			
Newcomb Street	Linda Vista	Avenue 144	5
Jaye Street	Olive Avenue	Avenue 144	5
Plano Street	Success Dr.	Avenue 136	2
Morton Avenue	Westwood St.	Conner Street	4.8
Success Drive	Plano Street	Page Street	2
Yates Ave.-Worth Ave	Main Street	Blue Heron	3.2
Total Miles			110.5

Source: TCAG *Bicycle Transportation Plan*, 2002.

As part of the proposed street standards, the bikeway network will be expanded as new arterial and collector streets are built. New streets will support approximately 75 miles of new Class II or III bikeways. The proposed General Plan Land Use Diagram also illustrates the expansion of the Tule River Parkway and Rail-to-Trails bikeway projects, as well as a new trail along the Friant-Kern Canal. These trails add approximately 25 miles of Class I bikeways to the network. Key upgrades within the existing built areas will be identified and prioritized to link schools, parks, trails, and other recreation areas.

PEDESTRIAN CIRCULATION

The pedestrian circulation system in Porterville 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.

While sidewalk capacity is not generally 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 made a priority 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.

GUIDING POLICIES

C-G-9 *Promote the use of bicycles to alleviate vehicle traffic and improve public health.*

C-G-10 *Promote pedestrian activity.*

IMPLEMENTING POLICIES

C-I-17 Establish bicycle lanes, bike routes and bike paths consistent with the General Plan.

C-I-18 Amend the Zoning Ordinance to require bicycle facilities at large commercial and industrial employer sites.

C-I-19 Increase bicycle safety by:

- Sweeping and repairing bicycle lanes and paths on a regular basis;
- Ensuring that bikeways are delineated and signed in accordance with Caltrans' standards, and lighting is provided, where needed;
- Providing bicycle paths or 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 and gravel;
- Provide adequate signage and markings warning vehicular traffic of the existence of merging or crossing bicycle traffic where bike routes and paths make transitions into or across roadways; and
- Work with the school districts to promote classes on bicycle safety in the schools.

C-I-20 Give bikes equal treatment in terms of provisions for safety and comfort on arterials and collectors as motor vehicles.

C-I-21 Develop a series of continuous walkways within new office parks, commercial districts, and residential neighborhoods so they connect to one another.

C-I-22 Provide for pedestrian-friendly zones in conjunction with the development, redevelopment, and design of mixed-use neighborhood core areas, the Downtown area, schools, parks, and other high use areas by:

- Providing intersection “bump outs” to reduce walking distances across streets in the Downtown and other high use areas;
- Providing pedestrian facilities at all signalized intersections;

- Providing sidewalks of adequate width to encourage pedestrian use; and
- Constructing adequately lit and safe access through subdivision sites.

C-I-23 Establish specific standards for pedestrian facilities to be accessible to physically disabled persons, and ensure that roadway improvement projects address mobility or accessibility for bicyclists or pedestrians.

C-I-24 Amend the Zoning Ordinance to include standards for pedestrian circulation in all new development, including patterned concrete sidewalks, pedestrian-scale lighting and tree canopy shading for walkways.

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.

DOWNTOWN PARKING

According to the *2001 Downtown Parking Management and Implementation Study*, downtown Porterville supply consists of 11 public lots with a total capacity of 839 spaces; numerous private lots totaling 1,429 spaces; and 974 public “on street” parking spaces. This study concluded that the parking supply downtown adequately serves the existing and anticipated future demand. However, the study recommended that the City be proactive in acquiring additional identified locations and developing municipal lots in order to regulate the future supply of parking as vacant lots or existing parking facilities are developed or converted.

GUIDING POLICY

C-G-11 *Foster practical parking solutions.*

IMPLEMENTING POLICIES

C-I-25 Ensure that downtown commercial businesses have adequate parking facilities; consider the need to construct new parking structures for public convenience and to promote economic development.

C-I-26 Amend the Zoning Ordinance to allow shared parking for mixed-uses where peak parking demands do not overlap.

C-I-27 Amend the City’s Parking Design Standards to promote multiple benefits, including shared parking for mixed-use projects, passive solar on parking

structures to generate energy for parking lot lighting, and pervious parking paving to improve groundwater recharge.

4.8 TRUCK ROUTES

In addition to moving people, the roadway system in Porterville carries a substantial number of trucks moving goods. Existing, designated truck routes within the Planning Area are shown on Figure 4-4. 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.

GUIDING POLICY

C-G-12 *Improve commercial goods movement.*

IMPLEMENTING POLICIES

C-I-28 Designate specific truck routes to provide for movement of goods throughout the City, ensure that adequate pavement depth, lane widths, and turn radii are maintained on the designated truck routes, and prohibit commercial trucks from non-truck routes except for deliveries.

These routes should avoid residential neighborhoods.

C-I-29 Maintain design standards for industrial streets that incorporate heavier loads associated with truck operations and larger turning radii to facilitate truck movements.

C-I-30 Continue to ensure adequate truck access to off-street loading areas in commercial areas.

C-I-31 Encourage regional freight movement on freeways and other appropriate routes; evaluate and implement vehicle weight limits as appropriate on arterial, collector, and local roadways to mitigate truck traffic impacts in the community.

C-I-32 Designate truck and tractor vehicle overnight parking at key freeway-oriented locations to avoid truck parking in residential neighborhoods.

4.9 AVIATION

The Porterville Municipal Airport provides aviation and transportation services for State and federal fire suppression activities, passengers, and commercial goods. The Airport is located southwest of the intersection of state routes 65 and 190, with access provided via Newcomb Street. The majority of the airport land, approximately 770 acres, is owned by the City of Porterville. Portions of the runway protection zone for Runway 30 extend outside of Airport property across Teapot Dome Avenue to the south and Newcomb Street to the east. The City does not have aviation easements over these areas.

In 2003, there were 73 aircraft based at the airport – 54 single-engine, 13 multi-engine, and six helicopters. Of the approximate 51,200 total aircraft operations (140 flights per day), 44 percent were local operations, 52 percent were itinerant, three percent were air taxi services, and one percent were military flights.

The Porterville Municipal Airport Rules and Regulations are contained in Chapter 4 of the City Code. The 1990 Airport Master Plan Report is intended to guide the long-term development of the airport, including the compatibility of adjacent land uses. The Airport Master Plan and the General Plan must be consistent with the Tulare County Comprehensive Airport Land Use Plan (CALUP). The principle concerns of airport land use planning fall into four categories:

- *Height restrictions:* to enhance aircraft safety by protecting the navigable airspace around airports;
- *Safety of persons on the ground:* to reduce risks to the population from aircraft operations and accidents;
- *Noise compatibility:* to minimize the effects of aircraft noise on communities adjacent to airports; and
- *Overflight:* to balance land development within traffic patterns of public use airports.



Porterville Municipal Airport

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.

AIRPORT LAYOUT PLAN

The 2006 *Airport Layout Plan (ALP)* updated the airport's physical development plan in accordance with Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design. The Plan is intended to provide for approximately 93,900 total aircraft operations or 257 flights per day by 2025.

GUIDING POLICY

- C-G-13 *Promote the Porterville Airport to meet increasing business and industrial goods movement demand.*

IMPLEMENTING POLICIES

- C-I-33 Work with Caltrans on providing interchange improvements and access to the Airport from the State highway system, at a location that will minimize environmental impacts, consistent with State design criteria.
- C-I-34 Coordinate Airport access improvement with planned commercial and industrial development on Airport lands and in the Airport environs to minimize traffic conflicts and ensure efficient use of these facilities.
- C-I-35 Ensure that the land uses in the Airport environs are consistent with the *Tulare County Comprehensive Airport Land Use Plan* in order to protect the safety of persons and property.
- Ensure no new schools and other noise sensitive uses are built within 4,000 feet of the Airport Clear Zone.
 - Ensure that any non-residential uses are not subject to aircraft hazards based on specific criteria developed to evaluate safety risks.
 - Limit residential parcels within the Airport Outer Approach/Departure Zone to at least five acres in size.

4.10 RAIL

Porterville was historically connected to Fresno and Bakersfield via two railway lines which primarily transported lumber and agricultural produce and goods. The Southern Pacific right-of-way was abandoned and the City is in the process of converting it to a trail. The San Joaquin Valley Railroad Company (SJVR), a subsidiary of RailAmerica, now owns the service rights to the Union Pacific right-of-way. However, since trucking became more economical, usage diminished and the railroad discontinued operations to Porterville. If service were to be restored, SJVR would operate one train to and from Porterville twice per week.

It is the City's goal to maintain the remaining railroad right-of-way. Future industrial development may allow freight operations to resume. In addition, the right-of-way may allow opportunities to transition the rail to passenger-carrying operations as a part of a regional light rail system.

GUIDING POLICY

- C-G-14 *Protect the City's rail corridor as an economic asset.*
- Implementing policies in the Land Use Element and Economic Development Element support this goal.*

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