3.0 CIRCULATION ELEMENT

3.0

Circulation Element



Looking north from the South Street interchange

INTRODUCTION

The Circulation Element, a legally required element, is included in this General Plan to address issues related to the movement of people and goods through and around the City of Orland. The purpose of this Element is to provide an overview of the means of transport to, from and within the City of Orland, and to address how these different methods can complement each other to make the City's circulation system work more efficiently and effectively. The Circulation Element addresses a range of circulation issues that affect mobility. Vehicle circulation on streets and highways, vehicle parking, bicycle and pedestrian circulation, and public transit are key issues analyzed in this Element. Other issues analyzed include public transportation, rail services, and air transportation.

The most common means of transportation is the automobile, and much of the circulation within Orland is focused on vehicle traffic. However, bicycles and pedestrians are visible throughout the City, and public transit is increasing in importance as the City grows.

State law recognizes that circulation and land use are closely related and requires that policies contemplated by the Circulation, Land Use, and other elements be related and consistent. The policies should demonstrate a balance between anticipated land

uses and the transportation facilities that serve them. The circulation policies also must be interwoven with other issues dealt with in this General Plan, including community character and design, housing and neighborhoods, recreation, air quality, noise, and safety policy issues.

LEGAL BASIS AND REQUIREMENTS

The legal requirements of the General Plan Circulation Element are defined within Government Code Section 65302(b) as follows:

The General Plan shall include a circulation element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other public utilities and facilities, all correlated with the land use element of the plan.

The Circulation Element provides a framework to guide transportation planning throughout the City of Orland and its Sphere(s) of Influence. Goals, objectives, policies, and programs provide direction for maintaining and improving Orland's transportation systems. In addition, this Element assesses the current circulation conditions in the area and analyzes improvements to support new development anticipated within the Land Use Element of the General Plan.

Regional Setting

The City is located in northeast Glenn County, approximately 18 miles west of Chico and approximately 100 miles north of Sacramento. The circulation-transportation system is typical of a rural town, with the exception that the western boundary is formed by Interstate 5, and State Route 32 runs east-west through the middle of the City.

Local Setting

The City circulation system consists of a grid pattern street layout with north-south and east-west oriented facilities. The existing roadway system is made up of residential streets, collectors (major and minor), arterials, and freeways. The existing system within the Orland area comprises approximately 27 miles of paved roadway. The majority of the circulation system is maintained by the City of Orland and generally consists of 2-lane roadway facilities with stop sign controls at intersections.

Highway 32, which is designated Walker Street through Orland, generally consists of a 2-lane rural highway with a center turn lane. Walker Street traverses the City's business district and serves as the primary roadway through the commercial corridor of the City. This section of road is the most heavily used thoroughfare for entering and exiting Orland and serves as both a major truck route and a significant road for regional recreational traffic.

ROADWAY NETWORK

Complete Streets

The California Complete Streets Act of 2008 required cities to update the Circulation Element of their General Plan to plan for a balanced, multimodal transportation network that meets the needs of all users of roadways. Complete Streets are roadways designed and operated to enable all users safe and convenient travel via all modes of transportation. Roadways developed using the principles of Complete Streets are designed to accommodate vehicles, transit, bicycles, and pedestrians using design that may include sidewalks or paths, on-or off-street bicycle facilities. The idea is that providing a balanced, multimodal transportation network will serve to reduce greenhouse gas emissions, make the most efficient use of transportation infrastructure, and improve public health by encouraging physical activity via shifting short trips in an automobile to biking, walking, and the use of public transit. The Complete Streets Act seeks to ensure that all residents, regardless of mode of travel, are provided an opportunity to use the City's circulation network.

The Complete Streets Act does not, however, dictate a specific street design or mandate that all streets accommodate all modes of travel in the same manner. A key factor in creating a successful multimodal transportation network is making sure the planning objectives, policies, and standards reflect the rural, suburban, and/or urban context of a community within the planning area. Therefore, the City's Complete Streets policies recognize the need to maintain design flexibility to allow for modified design standards in certain areas of the City that are consistent with the character of the neighborhood but still facilitate access by all users.

Roadway and Classifications

The existing roadway system in the Orland area comprises local streets, collectors (major and minor), arterials, and freeways.

Local

Local streets provide direct access to adjacent properties and are not intended to serve through traffic. Local streets provide access to Collector streets and generally carry low traffic volumes at low speeds. The right-of-way requirement for Local streets is 60 feet in width, with 40 feet of paved surface width between curbs, unless otherwise determined by the City Engineer.

Collector

Collector streets provide a linkage between Local streets and Arterial streets. Collector streets serve a variety of functions, providing access to individual properties and also allowing movement to and from Local streets. The right-of-way requirement for Major Collector streets is 84 feet in width, with paved surface between curbs 64 feet in width.

On Minor Collector streets, the right-of-way requirement is 60 feet, with a 40-foot curb-to-curb width. In industrial areas, a 64-foot right-of-way is required with a 44-foot curb-to-curb width. All right-of-way requirements are subject to being adjusted if determined necessary by the City Engineer.

Arterial

Arterial streets connect with Collector streets and some Local streets. Arterials carry the greatest traffic volumes and are primarily intended to provide mobility through the community. The right-of-way requirement for Arterial streets is 110 feet in width, with paved surface of 68 feet in width between curbs.

ROADWAY SYSTEM

The City has two state highways within its jurisdiction, and these are classified as arterials.

- Interstate 5 is a north-south oriented 4-lane freeway bisecting the western portion
 of the Planning Area. I-5 currently carries approximately 23,500 average daily
 vehicles (ADT) through Orland. Within the Planning Area, I-5 includes
 interchanges at County Road 16 (South Street) and at State Route
 (SR) 32/Newville Road.
- State Route 32 is generally a 2-lane rural highway, linking I-5 in Orland to the west to the Lassen National Forest east of the City of Chico. Between I-5 and SR 99, SR 32 is a major route for trucks and serves a significant amount of recreational traffic.
- SR 32 is the major access route to the commercial area of the City. The highway
 provides four travel lanes from the northbound ramp intersection at I-5 to Sixth
 Street. East of Sixth Street, SR 32 becomes a 2-lane facility which traverses the
 City of Orland business district and is designated as Walker Street from Sixth Street
 to the eastern city limits.
- In 2006, the SR 32/Sixth Street intersection underwent a major realignment to prevent trucks in the process of turning from mounting curbs at the corners, which frequently would cause them to swing into the lanes of oncoming traffic. While SR 32 originally traversed a one-block offset via two right-angle turns at the Sixth Street intersection, the realignment utilized a pair of curves to bring the highway into perpendicular intersection with Sixth Street. Additionally, existing traffic signals were upgraded and new signals were installed. The realignment allowed for a smoother flow of traffic and now allows large trucks to make turns without encroaching into lanes of oncoming traffic.

Other Arterials within Orland serve to connect the City to commercial and residential areas within the City and to agricultural areas within the county.

 Sixth Street, or County Road 99, is the north-south arterial in Orland and provides access to commercial and industrial land uses, as well as to some residential uses.

 South Street runs east-west and connects Sixth Street to I-5. South Street provides access from I-5 to commercial and residential areas in Orland and to agricultural areas surrounding Orland.

Interstate 5, SR 32, South Street and Sixth Street comprise the City's Arterial system. The California Department of Transportation (Caltrans) maintains all but South and Sixth streets of the City's Arterial system. Right-of-way widths and sign requirements are determined by Caltrans on Interstate 5 and SR 32. Access from Arterials to adjoining properties is limited to 300-foot intervals for safety and traffic efficiency. Curbside parking should be prohibited, where feasible.

Major Collector streets in Orland provide circulation between Arterial streets and major activity centers. Curbside parking should be prohibited wherever feasible on Major Collectors. The following streets comprise the City's Major Collector system:

- South Street (Sixth Street to Papst Avenue)
- Road 200 (Papst Avenue to Road N)
- Road 18 (Cortina Drive to Road 200)
- Cortina Drive (Newport Street to Road 18)
- Papst Avenue/County Road M (SR 32 to County Road 18)
- Road HH (Road 16 to Road 12)
- Road N (SR 32 to Road 200)
- Newville Road
- Road 16 (west of I-5)

Minor Collectors feed traffic from local streets to Major Collectors or Arterials. The following streets comprise the City's Minor Collector system:

- Date Street and extension (Olive Street to Sixth; Sixth to Road N)
- Bryant Street (Papst Avenue to Road MM)
- Tehama Street (SR 32 to East Street)
- Road 17 (East Street to Road MM)
- Hillsan Street (Papst Avenue to Road N)
- Railroad Avenue (Yolo Street to County Road 18)

- Yolo Street (Railroad Avenue to East Street)
- · Fourth Street (Yolo Street to SR 32)
- Cortina Dr/Porter Ln (Newport Avenue to Walker Street)
- East Street (Road 18 to Roosevelt; Roosevelt to Date Street)
- Papst Avenue (SR 32 to Date Street)
- Road M1/2 (Bryant Street to Date Street)
- Road MM (County Road 18 to Route 200; Road 200 to Date Street)
- Road N (SR 32 to Date Street)
- Eighth Street (South Street to Date Street)

Locations and designations of City streets are shown on Figure 3-1, Circulation Diagram. It should be noted that many of the Arterial-Collector streets in Orland have evolved from heavy use as opposed to formal development standards. Because of this, some streets may be designated Collectors, but not have all of the improvements required for new Collectors such as right-of-way width, travel way paving, and limited access. Therefore, the Goals, Policies, and Programs section of the Circulation Element addresses measures to bring these facilities into conformance with the functional classifications where feasible.

The remainder of the City streets are classified as Local and are the most predominant way of travel for most of the City. Local streets connect single-family homes and other uses to the Arterial-Collector network. Additionally, alleys provide rear access to parcels in several areas of the City. Alleys are not required by the City to adhere to the 60-foot right-of-way requirements for Local streets, as discussed previously.

LEVEL OF SERVICE (LOS)

Level of Service (LOS) is a measure of traffic service along a road or at an intersection. LOS ratings range from A through F, with LOS A, B, and C indicating traffic can move relatively freely. LOS D describes conditions where delay is more noticeable and average travel speeds are reduced. LOS E indicates significant delays and reduced speeds. LOS F is characterized by traffic flows at very low speeds (stop and go) and long delays (more than one minute). **Table 3-1**, below, provides detailed descriptions of LOS categories.

TABLE 3-1 LEVEL OF SERVICE DEFINITIONS

LOS	Description					
Α	Represents free flow. Excellent level of comfort, convenience, and freedom to maneuver.					
В	Stable flow, but the presence of other road users in the traffic stream causes noticeable reductions of comfort, convenience, and freedom to maneuver.					
С	Stable flow, but marks the beginning of the range of flow in which operation of individua users becomes significantly affected by interactions with others in the traffic stream.					
D	Represents high density, but stable flow. Users experience restriction in speed and freedom to maneuver, with reduced levels of comfort and convenience.					
E	Represents operating conditions at or near the capacity level. Freedom to maneuver is difficult, with users experiencing frustration and poor comfort and convenience. Unstable operations are frequent, where small increases in the traffic flow can cause breakdown conditions.					
F	Represents forced or breakdown flow. This condition exists wherever the amount of traffic approaching a point exceeds the volume that can traverse that point. Roadways store long queues behind such locations, with traffic advancing in stop and go "waves."					

In addition to traffic volume, level of service may be affected by a variety of "friction" factors. These may include large amounts of on-street parking, driveways or access points to the roadway, truck volumes, pedestrian activity and lack of left turn lanes. The presence of these factors may significantly reduce available roadway capacity, resulting in lower level of service operations.

Existing Roadway Levels of Service

For this General Plan Update, daily traffic volumes on area roads have been acquired and compared to generalized capacity thresholds to assess the quality of traffic operations. These thresholds are based on "typical" non-peak and peak-hour parameters and can be helpful for planning purposes to suggest the daily volume of traffic that might yield various peak-hour Levels of Service. The daily volume thresholds utilized by the City of Orland are presented in **Table 3-2**. It should be noted that the capacity of urban roadway segments is generally governed by the operation of adjacent intersections and that auxiliary lanes at these intersections can have a

significant effect on street segment and intersection capacity. Daily traffic volumes on the State Highway system have been obtained from Caltrans' Publication 2000 Traffic Volumes on California State Highways.

Vehicle Miles Traveled (VMT)

In 2013, the State of California passed Senate Bill 743 (SB 743), which altered how transportation impacts from new development are measured under the California Environmental Quality Act (CEQA). In California, any project requiring discretionary approval triggers the CEQA review process. Traditionally, transportation impacts under

CEQA have been assessed in terms of Level of Service (LOS), a measure of automobile delays along a roadway. SB 743 shifts from LOS as the primary measure of CEQA transportation impacts and replaces it with vehicle-miles traveled (VMT). VMT is the measure of the miles driven by vehicles within a specific area over a specific time period. Using VMT in place of LOS to measure transportation impacts is intended to promote the reduction of greenhouse gas emissions through reduced vehicle trips traveled, while encouraging development of multimodal transportation networks and a diversity of land uses.

VMT reductions can be achieved through a diverse land use mix that includes both employment and service uses located in proximity to each other, allowing residents to meet daily needs within a short distance from their homes. This reduces trip lengths and encourages use of alternative transportation modes such as walking, bicycle, and transit.

The Governor's Office of Planning and Research (OPR) provides guidance on implementation of the VMT metric, and in acknowledgement of the unique characteristics, implementation challenges, and the limited application of VMT mitigation measures, provides additional flexibility in rural non-Metropolitan Planning Organization areas, such as the City of Orland. Land use context is important in determining the potential range of effectiveness associated with VMT reduction strategies. Rural areas have fewer options for effective VMT reduction strategies compared to more dense urban areas due to auto-dependent land use patterns and limited transit availability. However, clustered small towns and small-town main streets may have substantial VMT benefits compared to isolated rural development. Examples could include focusing new development around the existing town center and diversifying new development types to mix land uses and reduce trip lengths.

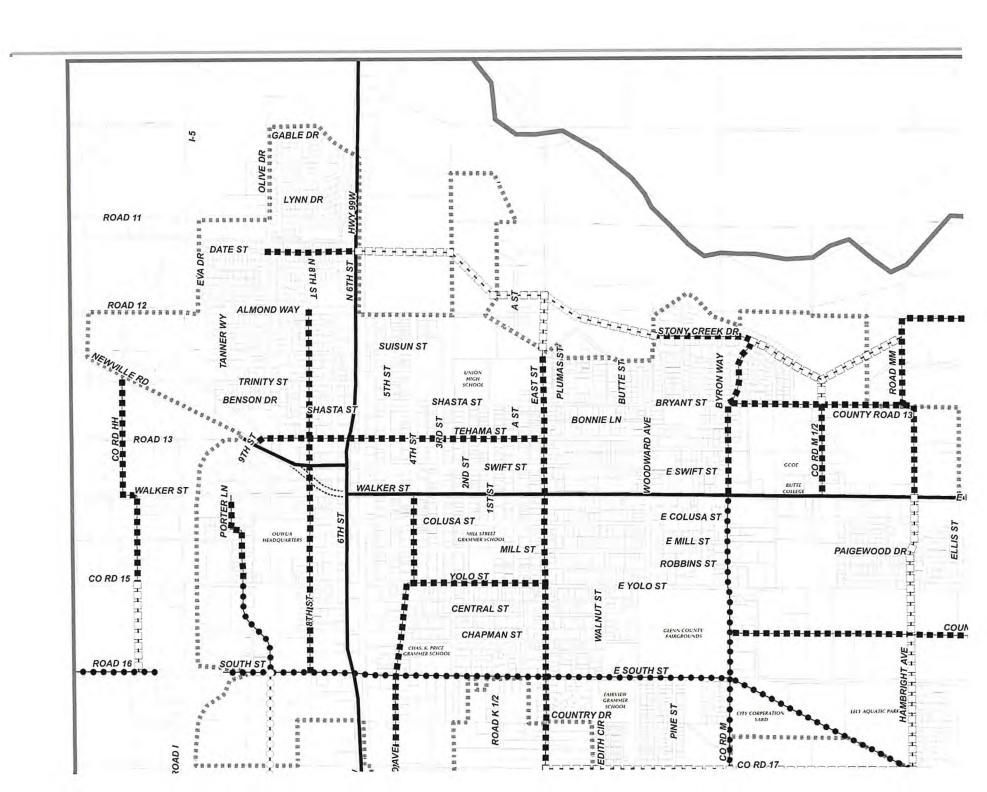
For the CEQA analysis to be meaningful, there must be a threshold against which project impacts are evaluated. The OPR recommends that new land use projects demonstrate a 15-percent reduction in VMT compared to the current VMT baseline. Analysis conducted by Fehr & Peers based on the OPR recommendation concluded that a rural-suburban area, such as Orland, would struggle to achieve this level of reduction. Adopting OPR's recommended threshold would mean individual land use projects would need to achieve VMT levels that are 15 percent below baseline conditions, which exceeds the maximum mitigation reduction of 10 percent for a suburban area based on research and guidance from the California Air Pollution Control Officers Association 2010 report Quantifying Greenhouse Gas Mitigation Measures (CAPCOA 2010) and is likely to be even more challenging in a rural area such as Orland. While the OPR 15-percent VMT reduction may be aspirational, adopting this level in Orland would result in the need to adopt a statement of overriding considerations with an Environmental Impact Report (EIR).

Suburban and rural areas outside Metropolitan Planning Organizations (MPOs), such as Orland, may adopt their own jurisdiction-specific thresholds due to limited options for realistic VMT mitigation. Adopting VMT thresholds specific to Orland will allow for locally based determination of what constitutes an environmental impact and allow for realistic project-specific mitigation.

In addition to adopting a threshold of significant, the OPR recommends cities adopt screening criteria to identify areas where less detailed environmental review can be sufficient. Instead of performing a complete VMT impact analysis for these projects, a partial analysis is used to assess whether the less than significant presumption is supported. Per the Technical Advisory, screening is generally intended for smaller, less complex projects or for projects supportive of SB 743 goals such as affordable housing projects located near high quality transit stations. If a project meets any of the screening criteria listed in Policy 3.12.A., it may be presumed to cause a less-than significant VMT impact without further study. This presumption is not a "safe harbor" but is subject to other substantial evidence verifying the presumption. All projects should be consistent with the General Plan as well as the Glenn County Regional Transportation Plan (RTP).

Although LOS can no longer be used to determine significant impacts under CEQA, SB 743 does not prevent local agencies from applying LOS standards when planning, designing, operating, and maintaining the roadway system. The City recognizes the continued importance of LOS to understand the local effects of land use development on the transportation network, therefore, LOS standards have been maintained as part of this General Plan.

This page intentionally left bla	and.		
This page intentionally left blo	INK.		



01-	1	20
Cha	prer	3.0

This page intentionally left blank.

TABLE 3-2
EVALUATION CRITERIA FOR TWO-WAY URBAN ROADWAYS DAILY LEVEL OF SERVICE

Facility	Number	Range of Daily Traffic Volumes for Each Level of Service							
Туре	of Lanes	LOS A	LOS B	LOS C	LOS D	LOS E	LOS F		
Local	2	0 - 2,700	2,701 - 3,150	3,151 - 3,600	3,601 - 4,050	4,051 - 4,500	4,500 +		
Minor Collector	2	0 - 4,800	4,801 - 5,600	5,601 - 6,400	6,401 - 7,200	7,201 - 8,000	8,000 +		
Major Collector	2	0 - 7,620	7,621 - 8,890	8,891 - 10,160	10,161 - 11,430	11,431 - 12,700	12,700		
Arterial	2	0 - 9,000	9,001 - 10,500	10,501 - 12,000	12,001 - 13,500	13,501 - 15,000	15,000		
Arterial	4	0 - 18,000	18,001 - 21,000	21,001 - 24,000	24,001 - 27,000	27,001 - 30,000	30,000		

On City streets, daily traffic volume counts were conducted by kdAnderson in December 2007. As shown in **Table 3-3**, the majority of the roadway system in Orland is currently categorized by LOS A operations. The only exception is Highway 32/Walker Street. Although Highway 32/Walker Street east of Papst Avenue currently experiences satisfactory LOS B operations based upon daily volume thresholds, increasing traffic within the City has resulted in a LOS D on the section of Walker between Sixth Street and Papst Avenue. While LOS D exceeds the threshold for Arterial streets within Orland, it should be noted that Walker Street/Highway 32 is a State Route. According to the Department of Transportation, the acceptable level of service on State Routes is an LOS D. This section of Walker Street/Highway 32 is therefore consistent with LOS standards.

TABLE 3-3
EXISTING ROADWAY VOLUMES AND OPERATING LEVELS OF SERVICE

		F attained		Vol	Levels of	
Roadway and Count Location		Functional Classification	Lanes	Daily	Peak Hour	Service
1	Almond Way, between Sixth Street & Eighth Street	Local	2	1,025	113	Α
2	Monterey Street, between Fifth Street & Sixth Street	Local	2	1,425	195	Α
3	Shasta Street, between Mellane Circle & Woodward Ave	Local	2	658	69	Α
4	Fifth Street, north of Walker Street (SR 32)	Local	2	756	85	Α
5	Fifth Street, south of Walker Street (SR 32)	Local	2	1,427	148	Α
6	Fourth Street, north of Walker Street	Local	2	1,210	163	Α

	(SR 32)					
7	Third Street, north of Walker Street (SR 32)	Local	2	1,079	145	Α
8	Third Street, south of Walker Street (SR 32)	Local	2	1,240	143	Α
9	Second Street, north of Walker Street (SR 32)	Local	2	474	72	Α
10	Second Street, south of Walker Street (SR 32)	Local	2	725	154	Α
11	A Street, north of Walker Street (SR 32)	Local	2	209	22	Α
12	A Street, south of Walker Street (SR 32)	Local	2	406	53	Α
13	Woodward Avenue, north of Walker Street (SR 32)	Local	2	1,951	185	Α
14	County Road M-1/2, north of Walker Street (SR 32)	Local	2	963	131	Α
15	Yolo Street, west of Papst Avenue	Local	2	1,045	128	Α
16	Newville Road (SR 32), west of County Road HH	Major Collector	2	5,018	46	Α
17	County Road 16, west of County Road HH	Major Collector	2	1,160	109	Α
18	Cortina Drive, north of South Street	Major Collector	2	723	67	Α
19	South Street, west of Papst Avenue	Major Collector	2	2,010	241	Α
20	Papst Avenue, south of South Street	Major Collector	2	1,284	140	Α
21	South Street (County Rd 200), west of County Road N	Major Collector	2	981	115	Α
22	County Road N, north of South Street (County Road 200)	Major Collector	2	206	38	Α
23	Tehama Street, between Fifth Street & Sixth Street	Minor Collector	2	1,562	186	Α
24	County Road HH, south of Newville Road (SR 32)	Minor Collector	2	945	90	Α
25	Tehama Street, northeast of Swift Street (SR 32)	Minor Collector	2	1,602	150	Α
26	Fourth Street, south of Walker Street (SR 32)	Minor Collector	2	2,141	214	Α
27	East Street, north of Walker Street (SR 32)	Minor Collector	2	2,482	331	Α
28	East Street, south of Walker Street (SR 32)	Minor Collector	2	3,072	363	Α
29	Fourth Street, between Mill Street &	Minor	2	1,350	182	Α

	Yolo Street	Ċollector				
30	Eight Street, north of South Street	Minor Collector	2	1,039	97	A
31	Railroad Avenue, north of South Street	Minor Collector	2	1,983	226	Ā
32	East Street, north of South Street	Minor Collector	2	2,311	310	A
33	Sixth Street, between Trinity Street & Shasta Street	Arterial	2	6,369	579	A
34	Sixth Street, north of South Street	Arterial	2 ·	5,372	496	Α
35	Sixth Street, south of South Street	Arterial	2	4,612	423	Α
36	SR 32 (Newville Road), east of I-5	Arterial	4	6,200	470	Å
37	SR 32 (Walker Street), east of Sixth Street	Arterial	2 .	12,800	1,000	Ď
38	-SR 32 (Walker Street), east of Papst Avenue	Arterial	2 .	9,200	700 [°]	В
39	SR 32 (Walker Street), east of County Road N	Arterial	2 .	9,400	900	B

Truck Routes

Trucks shall be routed through the City for safety and to minimize their impact on residential areas. Local deliveries are allowed on all streets; however, through truck traffic will be restricted to streets on the designated truck routes.

The following streets comprise the designated truck routes in the City.

- State Route 32/Walker Street
- Sixth Street (County Road 99)
- South Street (I-5 to the eastern boundary of Railroad Avenue)
- Railroad Avenue (South Street to County Road 18)
- Papst Avenue (SR 32 to South Street)
- County Road 200 (Papst Avenue to County Road N)
- Road 20 (proposed)

PUBLIC TRANSPORTATION

Rail

The City of Orland is served by railroad lines which are owned by the Union Pacific Railroad and leased/operated by the California Northern Railroad, which provides freight hauling service. The line runs north-south between Sixth and Fifth Streets. Passenger rail service provided by Amtrak runs the Sacramento-Dunsmuir line; the nearest passenger stop is in Chico. The line generally operates two trips per day.

Rail-served industrial activities, within and adjacent to the rail line, contribute to the City's economic base. Freight-rail service plays an important role in the transportation of heavy or bulk materials produced locally and shipped to regional markets. Rail spurs serving these activities have historically represented an important asset to the City of Orland and Glenn County.

Bus Service/Taxi Service

Public transportation bus service is provided to the City of Orland through Glenn Ride, a program of Glenn Transit Service. Glenn Transit Service was established by a Joint Powers Agreement in 1987 between the County and the cities of Willows and Orland. The governing board of Glenn Transit Service is the Regional Transit Committee comprising two representatives each from the three agencies. Glenn Ride is a fixed-route bus system with seven round trips every weekday and three round trips on Saturday from Willows to Chico. There are currently 14 bus stops in Orland.

School buses are operated by the Orland Unified School District. The District currently operates approximately 15 buses.

There are currently two taxi services operating within the City of Orland – one private and one subsidized by Glenn County.

Bicycle and Pedestrian Facilities

Current City standards require sidewalks along all improved streets except in the industrial areas. The City of Orland is currently planning for a pedestrian facility to include a multi-use path along Stony Creek. Additionally, the City has planned to provide multi-use trails within the rights-of-way of undergrounded canals, which could be utilized as pedestrian or bicycle pathways.

The City of Orland currently does not have many designated bicycle facilities. The City utilizes wide rights-of-way which can accommodate bicycle traffic in most areas, and bike racks are available at all schools and parks. The General Plan promotes the establishment of a shared use roadway system, but encourages newly developing areas to provide for bicycle facilities.

Airport Facilities

There are two publicly owned airports in Glenn County: Haigh Field, located near Orland, and the Willows-Glenn Airport. Haigh Field, located southeast of the City off County Road P, has a 5,160-foot paved and "pilot-controlled" lighted runway, 50 feet

wide. Its length qualifies it as a "Basic Transport" facility, suitable for use by general aviation users and capable of handling small or light business jets. There is sufficient land area for expanding service and facilities to meet the City's needs and also those of the region.

Limited regional commercial carrier service is available at the City of Chico Municipal Airport where international and national connections can be made through San Francisco International Airport. However, the nearest major regional and international service is provided by Sacramento International Airport.

Air Quality and Health Issues

Air pollution is a major regional issue that has been firmly linked to transportation—cars cause more than half of all air pollution in California. Strict emission-control standards have improved auto emissions since the 1960s, but air quality will be worse in the future because people are driving more. The California Clean Air Act was passed in 1988 to address this issue. The act established strict new air quality standards and gave air quality districts new powers to achieve them. The Conservation Element of this General Plan discusses air quality issues in more detail.

The impacts of automobile use on air quality will continue to shape regional, state, and federal transportation policies. Air quality issues will also shape local transportation policies, as efforts to reduce emissions from motor vehicles are emphasized more. Local air quality could be potentially affected by increased traffic in the Orland area. Increased traffic would contribute more exhaust emissions that would adversely affect air quality. Traffic congestion would exacerbate the problem, particularly as it would increase localized emissions of carbon monoxide.

Given the emphasis on improving air quality, the City should consider programs that encourage lesser use of gasoline-powered vehicles. As an example, the City could consider parking areas with electrical outlets for electric cars. Another alternative is the encouragement of ridesharing programs, using incentives. Still another is encouragement of the use of public transportation and other modes of transportation.

Traffic Calming

In areas where vehicle speeds are excessive, it is common practice to install traffic-calming intersection and roadway features to slow vehicles. In addition to the more traditional stop signs and speed bumps, traffic-calming techniques include roundabouts and street narrowing. City staff is in the process of evaluating alternative traffic calming techniques, which may be required in new development projects.

3.1 GOALS, POLICIES, AND PROGRAMS

GOAL 3.1: PLAN FOR, PROVIDE AND MAINTAIN A CIRCULATION SYSTEM THAT PERMITS THE SAFE AND EFFICIENT MOVEMENT OF PEOPLE AND GOODS THROUGHOUT THE CITY AND ORLAND PLANNING AREA.

- **Policy 3.1.A:** The City shall develop and maintain a network of roads that is compatible with the general land use patterns of the City.
- **Policy 3.1.B:** The City shall develop a vehicular circulation system that is safe and sensitive to adjoining land uses.
 - Program 3.1.B.1: The circulation system shall be designed to minimize excessive noise impacts on sensitive land uses. New development shall mitigate noise impacts in accordance with the requirements of the Noise Element.
- **Policy 3.1.C:** The City shall develop an efficient, economical public transportation system that meets the mobility needs of City residents.
- **Policy 3.1.D:** The City shall discourage through-traffic on local streets in residential areas.
 - Program 3.1.D.1: Should it be determined that a Local street is carrying an unacceptable level of through traffic, the City may implement appropriate means to reduce traffic through creation of one-way traffic flow, installation of traffic diversion devices, and/or any other means deemed to be acceptable.
 - Program 3.1.D.2: Residential subdivisions shall be designed to encourage access from Local to Collector streets and to discourage use of Local streets as a bypass to Arterial streets.
- **Policy 3.1.E:** The City shall consider additional landscape design requirements for new projects along the entryways into the City. Maintenance of these areas may be included in assessment district(s).
- GOAL 3.2: ESTABLISH A SYSTEM OF SAFE AND EFFICIENT LOCAL, COLLECTOR, AND ARTERIAL ROADS TO REDUCE TRAVEL TIME AND IMPROVE TRAFFIC SAFETY THAT IS CONSISTENT WITH THE LAND USE PATTERNS OF THE CITY.
 - **Policy 3.2.A:** Locations of Major Collector street intersections with Arterial streets shall be fixed by the Circulation Plan map. Roadway dedications and development design shall implement the Circulation Plan. Location of Major Collector alignments in newly developing areas shall be logical and efficient, and established early in the development process to aid in the consistent design of subdivisions. No development will be allowed to be constructed which would conflict with future planned streets or setbacks.
 - Program 3.2.A.1: Encourage property owners in newly developing areas to prepare Master Plans or Specific Plans that identify future major street alignments. The City will participate in the design of street alignments in advance of development to ensure consistent and logical design of the circulation system.

Program 3.2.A.2: Continue to work with Glenn County to coordinate new street alignments and improvements.

Program 3.2.A.3: The City may pursue the reservation of right-of-way and define specific development standards and requirements through the preparation and adoption of Roadway Plan Lines.

Policy 3.2.B: The City shall coordinate planning and development of the circulation system with development approvals throughout the City and Planning Area. All proposed land divisions shall be legally accessible by an improved public street.

Program 3.2.B.1: The City's functional street classification system shall include Arterial streets, Major and Minor Collector streets, and Local streets.

Program 3.2.B.2: Prepare and adopt Standard Plans and Specifications for all streets and roads including the following guidelines and standards:

- Major Collector streets shall be built at an approximate separation of one-half mile, typically leading to connections with an Arterial street(s). Because of existing right-of-way limitations, Major Collector streets may connect with Minor Collector streets when acceptable traffic volumes warrant such a connection.
- 2) Minor Collector streets may be on less than one-half mile separation and may be an extension of a Major Collector street or may be an existing street that connects one part of the City with another.
- 3) Minor Collector streets shall be utilized in new development areas to carry higher volume local traffic to Major Collector or Arterial streets.
- 4) The City shall prepare and adopt access standards for Arterial and Collector streets, which generally conform to the following guidelines:

Arterial Street Standards

- a. Driveway access to major activity centers should be located no closer than 200 feet to the intersection of a Major Collector or Arterial street.
- b. The distance between commercial or industrial driveways on Arterial streets should not be less than 300 feet.
- c. Existing points of ingress and egress shall be consolidated whenever possible. Driveway consolidation for new development shall be encouraged through access agreements along Arterial streets.

- d. Where there is no adopted design for median breaks on an Arterial street, there should be not less than 1,000 feet between median breaks (excluding left turn provisions). Median breaks should be consistent with the standards for driveways (not less than 300 feet from an adjacent intersection of an Arterial street).
- e. Separation of Minor Collector street entry points should not be less than 500 feet on Arterial streets and Major Collector streets.
- f. Single-family residential driveways are prohibited on new Arterial streets and shall be discouraged on existing Arterial streets.

Collector Street Standards

- a. Driveway access to major activity centers should be located no closer than 200 feet to the adjacent intersection of a Major Collector or Arterial street.
- b. The distance between commercial or industrial driveways on Collector streets should not be less than 200 feet.
- c. Raised concrete medians may be provided where left turn control is needed, and painted medians may be used at two-way left turn pockets where appropriate. Where concrete medians are provided, median breaks should be spaced not less than 300 feet apart.
- 6) Residential development shall not have direct access to and shall be oriented away (side-on or rear-on) from Arterial and Major Collector streets, and properly buffered so that the traffic carrying capacity on the street will be preserved and the residential environment protected from the potentially adverse characteristics of the street.
- 7) Where possible, Arterial and Major and Minor Collector streets shall form 4-leg, right-angle intersections; jogs, offset and skewed intersections of streets in near proximity shall be avoided.
- **Policy 3.2.C:** All streets, roads and easements within the City and Orland Planning Area shall be offered for dedication to the City and all improvements and rights-of-way shall be developed to City standards.
 - Program 3.2.C.1: Ultimate right-of-way shall be dedicated and/or developed to the appropriate width when a zone change to a greater density or intensity, division of property, or new development or major remodeling occurs.
- **Policy 3.2.D:** On developed streets, where the existing right-of-way does not meet the current standards, the City will adopt programs to acquire the ultimate right-of-way where practical and determined to be necessary or desirable.

Funding mechanisms may include the use of traffic impact fee moneys.

Program 3.2.D.1: Include the acquisition of right-of-way and the construction or reconstruction of streets in its Capital Improvement Program. The City reserves the right to reduce the ultimate right-of-way to avoid existing development for the construction of a travelway that generally meets the street classification standards, by reducing the area provided for landscaping, utilities, parking and other non-travel use.

Program 3.2.D.2: Additional right-of-way on the east side of Papst Avenue, 400 feet south of Bryant Street, and at Papst and Highway 32, will be acquired for City standard road widths. At Papst and Yolo streets, right-of-way will be acquired and intersection will be realigned to improve the north/south curve.

Policy 3.2.E: New development shall be required to mitigate traffic impacts associated with the project.

Program 3.2.E.1: Traffic studies of affected streets may be required as part of the environmental assessment of proposed projects to assure citywide traffic service levels are maintained.

Program 3.2.E.2: Traffic studies shall include level-of-service forecasts to account for individual and cumulative major land use changes in the City. Level-of-service forecasts shall be used to identify deficient roadways and update street improvement plans and priorities.

Policy 3.2.F: The City shall promote an active policy of consolidating driveways, access points and curb cuts along existing developed Arterial streets when a zone change to a greater density or intensity, division of property, or new development or a major remodeling occurs. The use of common driveways may be required as a condition for obtaining an encroachment onto a City dedicated road.

Policy 3.2.G: Locations of truck routes shall be fixed as designated on the Truck Route Map. The City shall maintain and enforce designated truck routes.

Program 3.2.G.1: Periodically review the list of streets designated as truck routes, and provide public notification of any changes to the truck route system.

Policy 3.2.H: To help ensure that adequate and safe travelways can be developed through existing developed areas of the City, right-of-way standards for each classification may be modified.

Policy 3.2.1: To ensure emergency access and response, new developments in the City and Planning Area will require circulation improvements that provide a second means of access for police, fire and medical vehicles.

- Program 3.2.1.1: The City and County will coordinate street naming and addressing to assure prompt and efficient emergency response.
- **Policy 3.2.J:** The City shall work with commercial and industrial uses to improve access to road and rail service to facilitate economic development activities.
- **Policy 3.2.K:** Proposed streets may vary from the location shown on the Circulation Plan provided that they intersect with existing streets and the following circumstances and situations exist:
- a) There must be circumstances surrounding the applicant's situation, limited to the physical conditions of the property, which are unique in that other property in the area does not have the same conditions. The unique circumstances must cause hardship to the property owner to justify the authorization to deviate from the planned road location.
- b) A deviation from this requirement shall not be granted if it will adversely affect the interests of the public or the interests of other residents and property owners within the vicinity of the premises in question.
- c) A deviation may be authorized when it is also considered as being consistent with the objectives of the General Plan.
- d) The mere existence of a peculiar situation which will result in unnecessary hardship to the applicant does not necessarily require the granting of a deviation.
- e) The granting of a deviation must not constitute the granting of a "special privilege" inconsistent with the limitations on other nearby properties.
- **Policy 3.2.L:** Each parcel that is developed within the Planning Area shall provide for street connections to adjacent parcels within the Planning Area.
- GOAL 3.3: FORMULATE AND ADOPT CIRCULATION DESIGN AND IMPROVEMENT STANDARDS THAT REQUIRE A LEVEL OF SERVICE CONSISTENT WITH THE DEMANDS GENERATED BY PROPOSED DEVELOPMENT, PUBLIC SAFETY, AND THE EFFICIENT USE OF PUBLIC AND PRIVATE RESOURCES AND WHICH ARE UNIFORMLY APPLIED IN THE ORLAND PLANNING AREA.
 - **Policy 3.3.A:** The City shall construct street and highway improvements to maintain an overall daily roadway level of service of "C" with an a.m. and p.m. peak-hour roadway and intersection level of service of "D" or better, unless other public health, safety, or welfare factors determine otherwise.
 - **Policy 3.3.B:** The City shall establish an inventory of City roads which will determine priorities for meeting circulation and transportation needs. Transportation projects shall be prioritized with emphasis on enhancing safety, reducing traffic congestion, and improving traffic circulation.

Policy 3.3.C: The City shall install traffic control devices at intersections, as needed, for public health and safety and to reduce traffic congestion at key intersections throughout the City.

Program 3.3.C.1: Improve intersections operating at less than p.m. peak-hour level of service "D" conditions by adding appropriate turning lanes to congested approaches, widening intersection approaches, or installing traffic signals:

- Signalization shall be predicated upon a warrant analysis, public safety and the discretion of the City. Signalization shall be considered at, but not limited to, the following intersections: (a) South and Sixth streets; (b) Date and Sixth streets; (c) Papst and Walker streets; (d) I-5 northbound ramps and SR 32; (e) I-5 southbound ramps and SR 32; and (f) Newville Road and County Road HH.
- Realign intersections of Papst and Yolo streets and County Road HH and County Road 14.
- Complete road connections at Papst and Road 13 and Rennat and Almond Way.
- Refer to Caltrans any request to signalize a State Route located in the City.
- GOAL 3.4: ACHIEVE A COORDINATED REGIONAL AND LOCAL TRANSPORTATION SYSTEM THAT MINIMIZES TRAFFIC CONGESTION AND EFFICIENTLY SERVES USERS.
 - **Policy 3.4.A:** Local circulation system improvements shall be consistent with the goals and objectives of the Glenn County Regional Transportation Plan.
 - **Policy 3.4.B:** The City shall work with Caltrans to identify needed improvements to its highway facilities in the City and implement necessary programs to assist in improving State Route interchanges/intersections with local roadways.
 - **Policy 3.4.C:** The City shall coordinate local transportation plans with regional plans to ensure eligibility for state and federal funding.
- GOAL 3.5: PROVIDE SAFE AND EFFICIENT PARKING AND LOADING FACILITIES FOR ALL NON-RESIDENTIAL LAND USES.
 - **Policy 3.5.A:** The City shall encourage shared parking facilities for both private businesses and public agencies.
 - Program 3.5.A.1: Adjacent parking areas for large commercial and professional developments should be designed to allow interconnection and free flow of traffic between those facilities. Access easements and agreements should be obtained during the development process to ensure future access.

Policy 3.5.B: The City shall reserve on-street parking in commercial areas for short-term users.

Program 3.5.B.1: Parking standards shall be evaluated for new development to ensure that parking requirements are satisfied within walking distance of the commercial area.

Policy 3.5. C: The City shall support the use of the fairgrounds parking lot for car pool parking.

GOAL 3.6: ENCOURAGE TRANSPORTATION ALTERNATIVES TO THE AUTOMOBILE.

Policy 3.6.A: Planning and development of Arterial and Major Collector streets shall include design features that can be used as public transit stops.

Program 3.6.A.1: Arterial and Major Collector streets shall be designed to provide for bus pull-outs and transit stops at locations determined by the City and transit agency to be appropriate.

Policy 3.6.B: The City shall encourage the use of car-pooling, vanpooling and flexible employment hours.

Program 3.6.B.1: New development shall consider Transportation System Management and Transportation Demand Management as strategies for the mitigation of traffic and parking congestion. Public transit, traffic management, ride sharing and parking management are to be used to the greatest extent practical.

Policy 3.6.C: The City shall coordinate with regional transit planners to determine the feasibility of developing and/or improving commuter bus service.

Policy 3.6.D: The City shall continue to support the continuation of transportation programs provided by social service agencies, particularly those serving persons with disabilities or other limitations. Coordination of other social service transit providers including schools, health services, and others should be recognized in the planning of circulation system.

Policy 3.6.E: The City shall work cooperatively with Glenn County to enhance aviation-related transportation options.

GOAL 3.7: A NON-VEHICULAR CIRCULATION SYSTEM LINKING IMPORTANT PUBLIC PLACES WITHIN THE COMMUNITY.

Policy 3.7.A: The City shall support the concept of an east/west multi-modal circulation link in north Orland.

Policy 3.7.B: The City should utilize canal rights-of-way and drainage facilities for multi-use purposes, to include trails.

- **Policy 3.7.C:** The City shall prioritize the creation of linkages between public places (schools, parks, government buildings) to facilitate the movement of people through the City.
- **Policy 3.7.D:** The City shall prioritize the establishment of a pedestrian crossing of Highway 32 linking residences to parks.
- GOAL 3.8: A SAFE SIDEWALK SYSTEM WHICH PROVIDES MAXIMUM OPPORTUNITIES FOR PEDESTRIAN TRAFFIC THROUGHOUT THE CITY.
 - **Policy 3.8.A:** Adequate sidewalks shall be planned and constructed in connection with street construction work in the City. Where existing roads may require additional right-of-way to accommodate full improvements including sidewalks, and where it is impractical to acquire sufficient right-of-way, the vehicle travelway will be the first priority.
 - **Policy 3.8.B:** Subdivision layouts shall include designs that promote pedestrian circulation in a safe and efficient manner.
 - Program 3.8.B.1: Implement street standards that include sidewalk or walkways on both sides of streets, where appropriate.
 - **Policy 3.8.C:** Bicycle lanes should be established where feasible along Major and Minor Collectors in newly developing areas. A bicycle route system should be identified which serves the existing developed City. Where bicycle lanes are proposed, they should be considered a shared facility with vehicular traffic on the street.
 - **Policy 3.8.D:** The City shall encourage existing facilities and require future facilities to conform to the American Disabilities Act provisions requiring access for disabled persons.
 - **Policy 3.8.E:** The City shall maximize the use of rights-of-way, easements, and utility corridors through the installation of pedestrian and bicycle facilities.
- GOAL 3.9: CONTRIBUTE TOWARD IMPROVING THE AIR QUALITY OF THE REGION THROUGH MORE EFFICIENT USE OF PRIVATE VEHICLES AND INCREASED USE OF ALTERNATIVE TRANSPORTATION MODES.
 - **Policy 3.9.A:** The City shall maintain and improve, where possible, environmental quality by the design of the circulation system and alternate forms of transportation.
 - **Policy 3.9.B:** The City shall support coordination with other cities, the County and planning agencies concerning land use and transportation planning as a means of improving air quality.
 - **Policy 3.9.C:** The City shall encourage the development of employment opportunities in Orland to reduce the need to commute to other communities

for employment.

Policy 3.9.D: The City shall support the expansion and improvement of transit systems and ride sharing programs to reduce the number of single-occupant vehicle trips.

Policy 3.9.E: The City shall support the use of alternatively fueled vehicles and fueling stations for public transit vehicles and City and private vehicles.

GOAL 3.10: TO PROVIDE THE HIGHEST LEVEL OF ROADWAY MAINTENANCE FOR CITY RESIDENTS.

Policy 3.10.A: The City shall maintain roadways in a condition that provides for the safety and comfort of roadway users.

GOAL 3.11: A ROADWAY NETWORK OF COMPLETE STREETS THAT PROVIDE ACCESSIBILITY FOR ALL USERS OF ALL AGES AND ABILITIES.

<u>Policy 3.11.A:</u> To the extent feasible, all new street construction and reconstruction shall be designed to achieve complete streets. Designs should accommodate mobility for all users, including bicyclists, pedestrians, transit vehicles, and motorists, appropriate to the function and context of the facility.

Policy 3.11.B: Where funding, right-of-way, and physical conditions allow, strive to retrofit existing streets into more complete streets, prioritizing improvements on roadways providing access to services, schools, parks, civic uses, as well as in the downtown and along mixed-use corridors. Consider all modes and users in decisions made affecting retrofit projects and strive to remove existing barriers to safe and connected travel.

GOAL 3.12: TO MAINTAIN AND REDUCE VEHICLE MILES TRAVELED (VMT) IN ACCORDANCE WITH \$8743 AND THE CITY'S ADOPTED POLICY.

Policy 3.12.A: Screening is generally intended for smaller, less complex projects or for projects supportive of SB 743 goals such as affordable housing projects located near high quality transit stations. If a project meets any of the following criteria, it may be presumed to cause a less-than significant VMT impact without further study. This presumption is not a "safe harbor" but is subject to other substantial evidence verifying the presumption. All projects should be consistent with the General Plan as well as the Glenn County Regional Transportation Plan (RTP).

Screen Type	<u>Screening Criteria</u>
<u>Small Projects</u>	<u>Single-family detached housing of 15 units or less;</u> OR
	Single-family or multi-family housing of 25 units or less; OR
	Office of 10,000 square feet of gross floor area; OR

General Plan October 2010 <u>November 2021</u>

Local Serving Retail Projects	 Industrial project of 30,000 square feet of gross floor area; OR Project generating 110 trips a day or less Local serving retail projects less than 50,000 square feet may be presumed to have a less than significant impact absent substantial evidence to the contrary. Local serving retail generally improves the convenience of shopping close to home and has the effect of reducing vehicle travel.
Locally Serving Public Facilities	Public facilities that serve the surrounding community or public facilities that are passive use may be presumed to have a less than significant impact absent substantial evidence to the contrary.
Affordable Housing Projects	An affordable housing project may be presumed to have a less than significant impact absent substantial evidence to the contrary.
<u>Transportation</u> <u>Projects</u>	<u>Transportation projects that promote non-automobile</u> transportation
Redevelopment Projects with Greater VMT Efficiency	A redevelopment project may be presumed to have a less than significant impact if the proposed project's total project VMT is less than the existing land use's total VMT.

<u>Policy 3.12.B.</u> Require new land use projects to achieve a 10-percent reduction in daily VMT compared to the 2020 Glenn County Regional Transportation Plan baseline conditions.

• The Baseline Daily VMT in 2020 was 25.00. Recommended threshold is 10% below baseline at 22.5.

<u>Policy 3.12.C:</u> Periodically update VMT baselines and thresholds of significance, as established in the City's VMT Policy, for evaluating transportation impacts under CEQA pursuant to SB 743.

<u>Policy 3.12.D.</u> Require implementation of CEQA project related VMT mitigation measures when warranted and monitor reductions in VMT from new development.

<u>Policy 3.12.E.</u> Promote the development of regional VMT mitigation in order to simplify the CEQA process and enhance the effectiveness of VMT reduction strategies.