

TRANSPORTATION/CIRCULATION

GOALS

The circulation plan for Oroville includes proposals relating to future standards and location of arterial, collector streets, and local access streets in and surrounding the community. As the use of the city's streets are directly related to the present and future use of land within and around the City of Oroville, the street plan should be directly related to the plan for future land use and public facilities in the community.

TRANSPORTATION/CIRCULATION GOALS:

- Provide a circulation and transportation system that is safe, efficient and economical.
- Link various land uses with respect to their diverse needs.
- Ensure dedication of adequate public access to avoid conflict associated with private easements.
- Promote pedestrian and non-motorized vehicle travel within the community in order to reduce traffic congestion as well as air and noise pollution.

RECOMMENDED DESIGN CRITERIA FOR CITY STREETS:

A four-tier classification system is used to describe and plan for the future of Oroville's circulation system.

The system includes the following levels of use:

- 1) Highways and Major Arterials
- 2) Arterials (minor)
- 3) Major Collectors
- 4) Access or Minor Collectors

The system was introduced in the 1964 Comprehensive Plan for Oroville and classifications of existing streets are consistent with designations proposed at that time. Due to the character of Oroville and its growth potential it is felt that four types of streets will adequately serve to meet the city's present and future circulation needs. The entire system is illustrated in Figure V-1 on the next page.

Figure V-1 - Transportation Circulation Map

On the following two pages in Figures V-2 and V-3 are design criteria for the construction of arterials and collectors developed by the City and County Design Standards Committees for the State of Washington. In adopting these standards, the state design committees have sought to encourage standardization of road design elements for consistency and to assure, so far as practical, that motoring, bicycling, and pedestrian public safety needs are met. Considerations include safety, convenience, pleasant appearance, proper drainage, and economic maintenance. The committees recognize that the city or county must have flexibility to carry out its general duty to provide streets, roads, and highways for the diverse and changing needs of the traveling public.

The table on page 4 does not specifically mention the same categories of streets conveyed in this Plan; however, reference is made to ADT and DHV. Generally, a projection of traffic volume should be made to determine the standards to be used for substantial development proposals.

ADT and DHV are methods of stating traffic volume and are defined as follows:

Average Daily Traffic (ADT) - The general unit of measure for traffic defined as the total volume during a given time period (in whole days), greater than one day and less than one year, divided by the number of days in that time period.

Design Hourly Volume (DHV) - The DHV is the thirtieth highest hourly volume (30 HV) of the future year chosen for design. On the average rural road or arterial, 30 HV is about 15 percent of ADT. For urban areas, 30 HV is usually between 8 to 12 percent of ADT.

Chapter 35.78 RCW requires cities and counties to adopt uniform definitions and design standards for municipal streets and roads. Standards for arterials are set through RCW 35.78.030 and RCW 35.78.040 by a state design standards committee in cooperation with the Washington State Department of Transportation (WSDOT). These uniform design standards apply to all new construction on major arterial and secondary arterial roads and streets and to reconstruction of old such roads and streets as far as practicable. No deviation from the adopted design standards may be made without approval of the state aid engineer.

Local Agency Guidelines Manual - The LAG manual provides policies and standards for local agencies to follow when using Federal Highway Administration (FHWA) funds for transportation projects

Figure V-2 - Minimum Design Standards

Figure V-3 - Road Construction Standards

ASSESSMENT - OROVILLE'S EXISTING CIRCULATION SYSTEM

The following is a descriptive assessment of the components include in Oroville's existing transportation/circulation system:

1. STATE HIGHWAY

The primary function of the state highway is to expedite movement of through traffic to major traffic generators such as the central business district, and from community to community.

State Route 97 passes through the heart of the City of Oroville. Main St. represents that portion of US 97 within the community, serving as a major arterial and frontage for the central business district. The highway extends north into Canada and south into Oregon and on through California to Mexico. Over 800,000 vehicles per year enter the United States at Osoyoos, nearly all of which pass through Oroville.

Highway 97 to the north and south of the community has been designated as a controlled access highway where the state Department of Transportation controls the location and design for intersections and access.

As is the case in other Okanogan Valley communities, SR 97 channels significant volumes of traffic through the downtown core resulting in both positive and negative impacts. As the communities grow and highway traffic increases the need for various traffic management approaches, whether they be bypasses or traffic lights, will be necessary.

2. EXISTING COMMUNITY ARTERIALS

The function of the community arterials is to collect and distribute traffic from state highways to less impacted streets, or directly to a major traffic generator. Oroville's community arterials may also represent a continuation of the county arterial system.

Existing community arterials are described as follows:

- A. Central Avenue and Cherry St. - Central Ave. divides the north and south portions of the community and provides major traffic flow to and from communities and recreational areas to the east and west of the city. Central Ave. leads east to Cherry St. which extends the arterial to the Cherry St. Bridge and the Oroville-Chesaw Highway. Central Avenue and Cherry streets connect with major east-west county arterials leading to the west at Nighthawk (with a 9 to 5 border crossing), and to Veranda Beach, Chesaw, and Molson to the east.
- B. 12th Avenue - provides arterial access to the southwest across the Similkameen to the old Chelan-Okanogan highway which leads south along the Okanogan River past Tonasket where the old

highway connects to SR 97, just south of Janis Bridge. This road also provides access to Loomis and surrounding recreation areas.

- C. 14th Avenue - east and west of Main Street, this community arterial serves major truck traffic to apple processing and storage facilities and the sawmills.
- D. Eastside Oroville Rd. – Northeast/South city by-pass route connecting SR 97 to the Oroville-Chesaw Highway.
- E. Eastlake Rd. – North/South primary route connecting Veranda Beach, Dorothy Scott Airport and all of the east side of the lake to the Oroville-Chesaw Highway.
- F. Westlake Rd. – North/South primary route connection all of the west side of the lake to SR97.

3. EXISTING COLLECTOR STREETS

The function of the collector street is to collect and distribute traffic from higher type arterial streets to local access streets, or directly to a destination.

The following are descriptions of the collector system:

- A. Ironwood St. - provides a collector for all access streets in the southwest portion of the community for movement of traffic to and from the school and downtown area. This collector also links 12th Avenue and Central Avenue.
- B. Main Street from 11th Avenue South - provides a collector for all access streets in the southwest portion of the community.
- C. 16th Street - provides access from both the east and west residential areas to and from the downtown area. Also, providing an alternate route to the Cherry Street Bridge.
- D. 5th Street - provides a collector for access streets in the southwest area to SR 97.
- E. 9th Street - provides a east/west collector for streets immediately south of the railroad tracks and providing access to the Jennings Loop Road at the east edge of the city.
- F. Deerpath - serves as a collector for the entire northwest residential area, connecting it to downtown and SR 97 to the north.

4. EXISTING ACCESS STREETS

The function of an access street is to provide access to adjacent property and not to encourage through traffic. Access streets are located

throughout the community, some serving as minor collectors for other streets but primarily are intended to provide limited access to properties.

THE CIRCULATION PLAN

The transportation/circulation map on page V- 2 includes the proposed location of new streets and street extensions. These streets are intended to open up presently landlocked property within the city and to provide a logical extension of the city's street pattern in undeveloped areas of the community.

The proposed street pattern represents only a minor departure from Oroville's traditional grid pattern of street development (short rectangular blocks with a great number of intersections). This proposed pattern intends to provide good access to the city's landlocked areas while not devoting more land to streets than is actually needed. In the hilly areas the streets are intended to be oriented to the terrain minimizing the amount of cutting and filling necessary for street construction resulting in more developable lots. The proposals for street extensions have been made without the necessary specific information relating to the contour of the land. However, a definite attempt has been made to coordinate proposed development with the area's contour. Any definite proposals for development of the area must take into consideration accurate topographical data which can be obtained from a land survey by a professional engineer or surveyor.

1. HIGHWAYS

Safe truck turning movements from/to SR97 and through town. – The City has identified two locations which require special attention to reduce traffic impacts:

- 1) SR97/5th Ave/Bob Neil Rd/Jennings Lp Rd junction; given the oblique angle of SR97 to the city/county street grid, some turning movements are challenged at best.
- 2) SR97(Main St.)/14th Ave; until such time as the Bob Neil Rd by-pass is completed some on street parking spaces may need to be restricted.

A recommendation is offered to address long-term planning concerns.

RECOMMENDATIONS

The Heavy Weight Corridor must be retained to promote the economic viability of the railroad and community as a whole.

The Transportation Element of the Okanogan County Comprehensive Plan should be used to address development proposals regarding the highway system's ability to carry traffic volumes that may be generated.

Additionally, the Oroville Transportation Plan should be regularly updated in the future to include details from the Okanogan County Transportation Element that apply to future growth in the city. The county's planning document is critical in ensuring an efficient interface between city county and state transportation systems.

2. COMMUNITY ARTERIALS

There are no suggested changes in the arterial system except for the following recommendation as it relates to highway proposals above.

3. COLLECTORS

- A. **Bob Neil Road (County Road #4685) is currently being revised to extend across the railroad to 14th Avenue as a collector that will provide a downtown by-pass for truck traffic to the apple processing warehouses and sawmill. This collector would also reroute much of the local access street traffic destined for southern locations that would normally require crossing the tracks in a higher-volume traffic area of Main Street.**
- B. The connection of Summit Drive and 16th Avenue would serve as a logical completion to a collector system that channels traffic to and from the downtown area.

4. ACCESS STREETS

Proposed access streets are located in the Grandview Addition to Oroville as this is an area with possible conversion of agricultural lands to residential uses. The access roads may vary slightly as development occurs since many of the orchard are currently subdivided in very large lot sizes and will likely be subject to more subdivision.

- A. A north and south route dividing block 3, Grandview Addition, providing rear access to possible future subdivisions.
- B. An east and west route dividing block 3, Grandview Addition, between lots 19 and 20.
- C. As a requirement for future subdivisions, vacated street (Illinois) in block 3, lot 6 (Ordinance #216) should be re-dedicated.
- D. Block 13, lots 8 and 9 of the Grandview Addition, should include a connection between Western Avenue and Summit Drive.
- E. **Dividing block 13 of the Grandview Addition a connection should be made between Deerpath and Western Avenue.**
- F. Dividing block 14, Grandview Addition, a connection should be made between Western Avenue and Ridge Avenue.
- G. **Kay Street should be improved to provide a connection between Central Avenue and 14th Avenue.**

5. PAVED STREETS, CURBS, SIDEWALKS & PEDESTRIAN PATHS

Development of sidewalks **do enhance** the appearance of the community, provide a safe area for children to play and pedestrians to walk. There

are presently sidewalks in the downtown area. Development of sidewalks in the future should be encouraged, especially along Highway 97 North of downtown, along major routes to the downtown area, to the school area, and to all of the parks. Curbing and paving projects help considerably in dressing up the city, in clearly defining the streets, and in the establishment of a definite street grade. See the Downtown Enhancement Element for further details on proposed pedestrian routes.

Shoreline proposals should include dedications/improvements to a pedestrian travel route in the shoreline connecting outlying development to city services.

The Similkameen Trail must be retained and improved as an economic generator for the community. Additionally, pedestrian bridge is sought connecting Veterans Memorial Park to the already established lake eastside trail for the same reasons.

Most street improvements are accomplished through the city's Six-Year Street Plan which is required to obtain state money for road improvements. The following are recommendations for future inclusion in that plan.

6. AIR TRANSPORT

Dorothy Scott Airport (0S7) is a public international municipal airport, located two miles northeast of Oroville, is owned and operated by the City of Oroville. The airport has a single north-south runway, designated as Runway 15/33. It is 4,017 feet long, 50 feet wide, and has an elevation of 1,069 feet. The airport was originally opened in August 1937.

The airport hold a service classification of federal general aviation airport. The hard surfaced runway is adequate for support of the Okanogan Valley. The airport services approximately 52 operations (take-off and landing) per day and sells fuel. Businesses that use the airport regularly include US Customs and Veranda Beach.

An Airport Layout and Improvement Plan was prepared in (insert) and has been aggressively implemented since that time. Recent improvements have included:

Runway seal coat

Another portion of the layout plan is the industrial park located on the northeast corner of the airport property. The City, using a mix of grants and city funds, has developed a conceptual master plan the proposed business and industry park. One major obstacle to this area is the lack of public sewer available to the property.

In order to preserve the airport from other development interests the city supports restrictions of use, density and structure heights in the approach, transitional, turning overlay districts.

Increased community awareness and support of the Dorothy Scoot Airport is necessary to allow continued growth and improvement to services provided by the airport, and to further enhance the growth of the City of Oroville and the entire Okanogan County.

7. RAIL TRANSPORT

The Cascade Columbia River Railroad (CSCB) provides freight service from the switching yard in Wenatchee (130 miles to the south) up the Columbia and Okanogan Valleys to Oroville.

In addition to regular freight such as lumber, etc the line is an integral node and leg in the Highway Heavy Weight Corridor noted above. The “reload” portion of Oroville Reman & Reload mill yard is a business that will convert British Columbia, Canada trucks which can be loaded heavier than Washington State truck, a railhead to off load/on load goods to/from the rail close to the port of entry.

In order to preserve the rail line from other development interests the city should develop restrictions of use to reduce potential conflicts and provide areas for growth of the industry.

Increased community awareness and support of the rail line is necessary to allow continued growth and improvement to services provided by the airport, and to further enhance the growth of the City of Oroville and the entire Okanogan County.

IMPLEMENTATION OF THE TRANSPORTATION/CIRCULATION PLAN

The arterial section of the street plan can be implemented through encouraging local travel on the designated arterials. This can be done through use of arterial standards in design and construction. Use of properly located "Stop" and "Yield Right of Way" signs will also help implement the arterial plan. Traffic control signing can be accomplished by giving highest preference for traffic movement to community arterials, second preference to collector streets, and lowest preferences to residential or access streets.

Along with the Six-Year Street Plan, the city's capital facilities plan (CFP) could assist in the extension of arterial streets. The Oroville CFP should include acquisition and development of public property for streets and related infrastructure to expand the transportation/circulations system in response to anticipated growth.

Provision for the extension of streets outside the city limits and in the undeveloped portion of city can most easily be handled through requirements of subdivision approval. Subdivision regulations in both the City of Oroville and Okanogan County would help to assure the proper development of this outlying land. Subdivision regulations should include standards relating to the design of streets, lots, and blocks.

The implementation of many of the proposed street improvements within the city can be done through cooperation between the city and the affected property owners. Such an approach requires a commitment on behalf of city officials to provide public education and solicit involvement.

EXCESS RIGHT-OF-WAY WIDTHS This plan understands that the plans and objectives of a hundred years ago do not necessarily have the same emphasis today. The city should review existing platted right-of-ways to these adopted standards and if lands are found to be held in excess, return those excess lands to the abutting owners for additional development rights. Primarily in residential zones not subject to commercial or industrial development pressures.

