

# City of Cave Junction

## Transportation System Plan

Adopted July 2001

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# INTRODUCTION

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Transportation in Cave Junction is an important element for a vital, successful community. People need to get around town and reach outside destinations. The efficient movement of goods and services is vital to the local businesses in the City. Alternatives to the private automobile, such as bicycling, walking, and public transportation, are important to Cave Junction and the health of Southern Oregon.

With the passage of the Transportation Planning Rule (TPR) in 1991, the State of Oregon officially recognized the importance of developing an efficient transportation system in concert with land use planning activities. The TPR provides direction for the enactment of transportation planning requirements of the Oregon Revised Statute 197.712, OAR 660 Division 12. The TPR directs local jurisdictions to amend existing transportation plans and associated ordinances to help develop an efficient, multimodal transportation system. This transportation plan was prepared in accordance with these requirements for the City of Cave Junction (See Figure 1).

Recognizing the need for a safe and efficient transportation system, the City of Cave Junction has initiated an update of the existing transportation element, which was adopted in 1984. The purpose of this plan is to: 1) ensure the future transportation system develops in an orderly and cost-effective manner; and 2) serve as a guide for City decision makers on transportation issues.

Modifications to the City's development ordinances and zoning codes were made as part of this planning process.

Five specific study goals were developed to provide a framework for Cave Junction's plan. Draft goals were presented at two public meetings, and were modified to best suit the needs of the community. Refined goals with specific policies and implementation strategies are included later to help implement these goals.

- Goal 1** To provide for a safe and efficient transportation system network.
- Goal 2** To provide for alternative travel modes that reduce primary dependence on the automobile.
- Goal 3** To develop a transportation system that facilitates the efficient flow of goods and services to strengthen the local economy.
- Goal 4** To support a transportation system that minimizes adverse environmental impacts and encourages the conservation of natural resources.
- Goal 5** To support and encourage multi-jurisdictional cooperation to maintain and improve the transportation system.

**FIGURE 1** TPR Standards for Cities Less than 2,500

<p><b>A road plan for a network of arterials and collectors</b> Local functional classifications shall be consistent with regional and state functional classifications</p>
<p><b>A public transportation plan (excluding local public transit system)</b> Describe services available for the transportation disadvantaged Identify service inadequacies Inventory and assessment of existing and committed facilities and services</p>
<p><b>A bicycle and pedestrian plan</b> A plan for a network of bicycle and pedestrian routes A list of facility improvements</p>
<p><b>An air transportation plan</b> Identification of existing and planned public use airports</p>
<p><b>A rail transportation plan</b> Identification of existing and planned public use mainline and branch-line railroads and railroad facilities</p>
<p><b>A pipeline transportation plan</b> Identification of existing and planned major regional pipelines and terminals</p>
<p><b>A water transportation plan</b> Identification of existing and planned major regional water facilities</p>
<p><b>Policies and land use regulations for implementing the transportation system plan</b> Local government shall amend its land use regulations to implement the TSP</p>
<p><b>Adopt land use and subdivision ordinance amendments to protect transportation facilities for their identified functions</b> Access control measures, standards to protect future operations of airports, etc. Bicycle parking facilities within and between residential, commercial, employment and institutional areas</p>

## COMMUNITY ISSUES

Citizen input was obtained for this project throughout the planning process. First, a number of citizens and City officials were interviewed to identify key considerations. Second, public workshops were held in December 1994 and April 1999 to present these initial issues and identify others. While there is more than a four-year interval between these workshops, many of the concerns are similar. A number of issues were identified that have guided the development of this plan:

## Issues identified in 1994

Several residents felt the current speed limit (30 mph) on Highway 199 is too high. It was suggested that the speed limit be lowered to 25 mph.

Curb ramps are needed along Highway 199 at eight locations. Specific needs for ramps were identified on Highway 199 at Lister and on Lister at Hussey.

The city needs better facilities for bicyclists and pedestrians, especially around schools and retirement developments. It was pointed out that roads should be prioritized for bicycle use. Overall, people expressed concern with children riding along 199. The need for bicycle lanes on Highway 199 was a lower priority than on Caves Highway (U.S. 46), Laurel Road, and Junction Avenue.

The senior population needs safe, flat sidewalks. Many of the existing sidewalks in town are uneven because of driveways accessing the streets.

There is a need for a left turn lane on Highway 199 at Laurel Road. It is a blind intersection on a hill. The County has acquired the necessary right-of-way.

The existing blinking signal at Highway 199 and River Street should operate 24 hours a day, instead of just during daylight hours. Some people want a traffic signal at this intersection. Others felt it would create a hazardous situation if traffic backed up on the highway and caused rear-end accidents.

There should be a traffic signal on the crosswalk on Highway 199 east of Schumacher.

There is a need for public transportation. Kids need transportation to other areas for work. Seniors need transportation for medical appointments and shopping. It was pointed out that if there was public transportation between Hays Hill and the California border, people could come to Cave Junction for services/shopping instead of going to Grants Pass.

Several safety concerns were raised on Highway 199. Specifically, there aren't enough snowplows being used in the Illinois Valley after large storms. The hazard stripes on the road edges can't be seen during bad weather at night. Recessed reflectors should be installed. [Note: Recessed reflectors were installed on Highway 199 during the planning Process.]

The blinking light now at River Street should be moved to a point midway between Lister and Watkins, and a crosswalk should be added there. This is the longest point between intersections in town and is located where many youths hang out.

Hussey Street should be extended across Palmer to River Street. This would relieve congestion caused by traffic going to and from public buildings.

The State has looked at a bypass for Cave Junction using Laurel Road and Old Stage Road. The bypass isn't wanted or needed. Many businesses have developed along the highway through town for the tourist trade and would be hurt by a bypass. Congestion on Highway 199 is not yet a problem.

Highway 199 should be designated as a National Historic Highway.

Tourist accommodations, such as RV parking and easy in and out access are important to local businesses.

There is a need for more downtown off-street parking.

## Issues Identified in 1999:

Cave Junction needs to differ from Grants Pass, where increased traffic has displaced residential uses along 6<sup>th</sup> and 7<sup>th</sup> Streets.

Highway 199 should be closed to vehicles through town, and a bypass should be provided.

River Street has no sidewalks.

Senior Center is isolated from its clientele.

Public services are fragmented throughout the community.

Need public transit to connect uses.

Only dedicated bike lane in town is on River Street.

Split jurisdiction issues: Streets are maintained by the state, county, or city, and in some cases, jurisdiction is shared.

What kind of customers should city be attracting?

Need pedestrian bridge to connect city with Forks Park.

Link Jubilee Park to Highway 199.

More employment/access to employment

Transit opportunities need to be publicized to employers/citizens.

Tie transit to RCC, introducing high school students who are taking college courses to the concept of using transit while they are still in school, hoping use will continue into adulthood.

Medivan system is needed.

A transit survey should be conducted to determine what level of transit would be beneficial to the community.

This is a village. how does it interact with area outside city limits?

Except for 199, it's still a safe place to walk.

Access to schools/parks remains a priority.

City should develop a pedestrian trail system.

Can irrigation ditch be developed as a trail?

Shuttle plane to Medford should be considered.

Sidewalks needed:

- Barlow
- S. Junction
- 199 to park
- West River
- Caves Highway

Shop Smart has three entrances, creating a safety hazard.

Alleys should be preserved/enhanced.

Can we reorient uses away from Hwy 199? Make a commercial focus east to west rather than north to south.

Tie public uses to commercial.

Desire a walkable city

River Street signal is needed.

Are left turn lanes on Highway 199 feasible?

Streetlights should be added, especially near public uses.

Streetlights should be directed downward.

Provide shade, water, street trees.

Lions Club train could work as a downtown shuttle?

Need more speed limit signs

Perception that city tries to control rest of valley

## **EXISTING PLANS**

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### **OVERVIEW**

The purpose of this section is to review existing plans and to identify important transportation and land use issues that need to be considered in the preparation of the Cave Junction Transportation Systems Plan (TSP). A variety of transportation studies, transportation plans, and other transportation-related documents have been produced in the past. The relevance of each of these documents in relation to the preparation of the Cave Junction TSP varies widely. This technical memorandum will provide a synopsis of the following documents: Statewide Transportation Improvement Program (STIP), 2000-2003, Josephine County Comprehensive Plan Transportation Element, the Cave Junction Comprehensive Plan, and the Cave Junction Municipal Code.

### **OREGON TRANSPORTATION PLAN/OREGON MODAL PLANS**

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Adopted in 1999, the Oregon Transportation Plan (OTP) is the Oregon Department of Transportation's (ODOT) policy guiding document. The OTP influences all transportation planning in Oregon. Separate modal plans serve as individual elements of the OTP. The plans provide a framework for cooperation between ODOT and local jurisdictions and offer guidance to cities and counties for developing local modal plans. The following table lists the different modal plans that have been established and the date the plan was adopted by the Oregon Transportation Commission (OTC).

<b>Plan</b>	<b>Adopted</b>
Oregon Transportation Plan	1992
Aviation Plan	2000
Bicycle/Pedestrian Plan	1995
Highway Plan	1999
Public Transportation Plan	1997
Rail Freight Plan	1994
Rail Passenger Policy and Plan	1992
Transportation Safety and Action Plan	1995

### **Oregon Transportation Plan (1992)**



The Oregon Transportation Commission adopted the Oregon Transportation Plan in September 1992. The OTP has three elements: (1) Goals and Policies; (2) Transportation System; and (3) Implementation. The OTP meets a legal requirement that the OTC develop and maintain a plan for a multimodal transportation system for Oregon. The OTP also implements the Federal Intermodal Surface Transportation Efficiency ACT (ISTEA) requirements for a state transportation plan. The OTP also meets land use planning requirement for State agency coordination and the Goal 12 Transportation Planning Rule. This rule requires ODOT, the cities, and the counties of Oregon to cooperate and to develop balanced transportation systems.

### **Oregon Aviation Plan**

The Aviation Plan was adopted in March 2000. It provides forecasts and inventories for airports. Some key issues that affect the plan are the following:

- § Local governments own most airports.
- § The federal government owns most of the navigational system.
- § FAA determines funding levels and prioritization of expenditures.

### **Oregon Bicycle and Pedestrian Plan (1995)**

The goal of this Plan is to provide safe, accessible and convenient bicycling and walking facilities and to support and encourage increased levels of bicycling and walking. The plan identifies policies, classification of bikeways, construction and maintenance guidelines, and suggested actions to achieve these objectives. These actions are: (1) provide bikeway and walkway systems that are integrated with other transportation systems; (2) create a safe, convenient, and attractive bicycling and walking environment, and (3) develop education programs that improve bicycle and pedestrian safety.

### **Oregon Highway Plan (1999)**

This plan defines policies and investment strategies for Oregon's state highways for the next 20 years. It further refines the goals and policies of the Oregon Transportation Plan and is part of Oregon's Statewide Transportation Plan. The Highway Plan has three main elements:

- § The **Vision Element** presents a vision for the future of the state highway system, describes economic and demographic trends in Oregon, future transportation technologies, summarizes the policy and legal context of the Highway Plan, and contains information on the current highway system.
- § The **Policy Element** contains goals, policies, and actions in five policy areas: system definition, system management, access management, travel alternatives, and environmental and scenic resources.
- § The **System Element** contains an analysis of state highway needs, revenue forecasts, descriptions of investment strategies, implementation strategy, and performance measures.

The Highway Plan gives policy and investment direction to corridor plans and transportation systems plans that are being prepared around the state, but it leaves the responsibility for identifying specific projects and modal alternatives to these plans to local jurisdictions. The Highway Plan also specifies level of service and access management standards for Highway 199 and Interstate 5.

### **Oregon Public Transportation Plan (1997)**

This plan is primarily focused on public transportation in metropolitan and urban areas. The following minimum public transportation level of service standards (for communities with a population of at least 2,500 located within 20 miles of an urban central city) applies for conditions in the year 2015.

- § Coordinate intercity senior and disabled services with intercity bus and van services open to the general public.
- § Coordinate local public transportation and senior and disabled services to intercity bus services.
- § Provide an accessible ride to anyone requesting services.
- § Provide at least 1.7 annual hours of public transportation service per capita with fixed-route, dial-a-ride or other service types.
- § Provide at least one accessible vehicle for every 40 hours of service.
- § Provide backup vehicle for every 3.5 miles.
- § Provide daily peak hour commuter service to the core areas of the central city.
- § Provide a guaranteed ride home program to all users of the public transportation system and publicize it well.
- § Provide park and ride facilities along transit route corridors to meet reasonable peak and off-peak demand for such facilities.
- § Maintain vehicles and corresponding facilities in a cost-effective manner and replace vehicles when they reach suggested retirement age.
- § Establish ride-matching and demand management programs in communities of 5,000 where there are employers with 500 or more workers who are not already covered by a regional ride-matching/demand management program.
- § Establish ride-matching and demand management programs in communities of 10,000.

In addition to public transportation, the plan also describes minimum level of service standards for intercity bus and rail standards.

### **Oregon Rail Freight Plan (1994)**

This plan presents an overview of the rail system in Oregon. It outlines the State rail planning process and examines specific rail lines in detail that may be eligible for State or Federal assistance. In addition, the plan describes minimum level of service standards for freight and passenger rail systems in Oregon. This plan describes use patterns of the Southern Pacific route that passes through Talent. The plan examines the trend of service on low density rail lines increasingly provided by the short haul (Class 111) railroads.

### **Oregon Rail Passenger Plan (1992)**

This plan evaluates all rail lines. Two corridors are identified as having high potential for development:

- § Eugene-Portland portion of high-speed rail corridor.
- § Portland to suburban areas of Tualatin to McMinnville with possible extensions to Salem/Eugene (interurban commuter service).

### **Oregon Transportation Safety and Action Plan (1995)**

This plan established the safety priorities for Oregon by identifying 70 actions relating to all modes of transportation and the roadway, driver and vehicle aspects. Included in this plan is a specific action regarding the way safety issues should be considered in local transportation planning.

Local transportation plans, as well as modal and corridor plans should consider the following:

- § Involvement in the planning process of engineering, enforcement, emergency service personnel, and local transportation safety groups.
- § Safety objectives.
- § Resolution of goal conflicts between safety and other issues.

### **US Highway 199 Corridor Plan**

JRH published the Highway 199 Rural Corridor Plan on May 17, 2000. The plan, which is still in draft mode, covers the length of Highway 199 from Grants Pass to the California border, addressing corridor safety, facility management, and intergovernmental. The plan defers to the planning efforts of both Grants Pass and Cave Junction for the portions of the highways within their urban growth boundaries. The following policies are excerpted from the Corridor Plan:

- 1) Improve the highway's safety for motor vehicles by:
  - § Reducing direct private access and controlling future access consistent with ODOT's Access Management Rule (OAR 734-051)
- 2) Coordinate transportation and land use through the designation of highway segments with the Cities of Cave Junction and Grants Pass that help to foster compact development patterns. Explore designating:
  - § Cave Junction's downtown as an "Urban business area".
- 4) Collaborate and coordinate public transportation services improvements within the corridor.
  - § Work with Cave Junction, Grants Pass, and Josephine County to identify, through their TSP's, strategies that will foster delivery of low-cost frequent public transportation services.
- 5) Improve the extent and quality of bicycle transportation facilities with the corridor. Place priority on shoulder widening improvements in:
  - § Cave Junction
- 7) Widen shoulders consistent with the order of priority listed below, to foster an improved pedestrian environment.
  - § In Kerby
  - § Kerby to Cave Junction
  - § In Selma
  - § Cave Junction to O'Brien
- 9) Support local governments' plans to develop community gateways, internal circulation

networks, and adequate pedestrian and bicycle facilities consistent with the classifications and function of the facility as a Statewide Highway.

## **STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM (STIP), 2000-2003**

Oregon's Statewide Transportation Improvement Program is a four-year construction (2000-2003), multi modal program which fulfills the requirements of Transportation Efficiency Act for the 21<sup>st</sup> Century (TEA-21). It is a compilation of projects utilizing various federal and state funding programs, and includes projects on the state, city and county transportation systems, and projects in the National Parks, National Forests, and Indian Reservations. Also included are projects within the metropolitan planning organizations (MPOs) that are of regional interest or significance.

The STIP is not a planning document; it is a project programming document developed through various planning processes involving local and regional governments, transportation agencies, and the interested public. Through the STIP, ODOT allocates resources to those projects that have been given the highest priority in these plans.

The 2000-2003 STIP includes one project that affects the city:

2001: Improve safety elements at Redwood Highway and River Street. Approximate cost: \$280,000.

**TPR** - The Oregon Transportation Planning Rule was adopted by the Land Conservation and Development Commission in 1991 and was revised in 1995. The TPR guides regional and local transportation planning in carrying out the LCDC Transportation Goal. It also required ODOT to adopt a transportation system plan, which occurred in September 1992. Cities are required to adopt local transportation system plans that are consistent with the state TSP.

## **EXISTING CITY PLANS**

### **Municipal Code - 1994**

As with many cities, the Cave Junction Municipal Code regulates activities within the city limits. The code is divided into chapters referred to as titles. Following is a listing of the regulations that specifically relate to transportation:

#### **Title 10 - Vehicles and Traffic**

10.04.60 establishes traffic control standards

#### **Title 12 - Streets, sidewalks and public places**

12.04.010 - street design standards

12.08 - Street and sidewalk design standards

12.08.030 discusses cul-de-sacs, but doesn't establish maximum length

12.08.080 Sidewalks required to be 4.5 feet wide. TPR recommends 5 feet on local streets, 6 feet on collectors and arterials in residential and industrial zones; 6 feet on local streets, 7 feet on collectors, and 9 feet on arterials for communities less than 25,000.

**Title 16 - Subdivisions and Land Partitioning**

16.20.070 - street ROW standards don't differentiate between residential and others.

16.20.170 - street lights and utility improvements

**Title 17 - Zoning**

17.12.120 - Access standards

17.24.040 - 9000 square feet for duplex; 1000 additional square feet for each additional unit

17.32.020 - Parking requirements

17.36 - PUDs

**Cave Junction Comprehensive Plan**

The existing comprehensive plan was adopted in 1984. The City approved revisions to the plan that resulted from periodic review. The City-approved plan has not yet been acknowledged by the State. The current plan includes a proposed street plan and the following policies and recommendations relating to transportation:

Policies:

1. The City shall require dedication of adequate street right-of-way from developers according to the major streets plan and standards set forth in the subdivision ordinance.
2. The City will encourage social service agencies to provide services to the transportation disadvantaged.
3. The City will provide commercial zoning on streets parallel to the Redwood Highway to relieve potential congestion.
4. The City will encourage the use of Redwood Highway and Oregon Caves Highway for commercial use.

Recommendations:

1. Standards for curb cuts, vision clearance and other traffic safety measures in all areas of the city shall be maintained.
2. Curb cuts onto the State and U.S. highways shall be reviewed with the appropriate state and federal agencies.
3. Traffic control devices must be installed at major intersections.
4. The city shall complete and implement the Transportation Element of the Comprehensive Plan for the planning area.
5. Repair, upgrade & expand street network.
6. Make improvements necessary to comply with American Disability Act.
7. The city will support an intercity bus program.
8. City shall work with the controlling agency to ensure that left turn lanes with proper signals shall be installed at intersections of arterial and collector streets.

### **August 1995 Draft Comprehensive Plan Transportation Element**

Prepared by RVCOG, this plan needs updating to meet the TPR requirements that were also updated in 1995. The plan includes many of the elements required by the TPR and these will be incorporated, where appropriate, into the TSP.

## **EXISTING COUNTY PLANS**

### **Josephine County Transportation System Plan**

The State TSP requires counties to prepare a county-wide TSP. A project scope of work is being developed by the County.

### **Josephine County Comprehensive Plan**

The comprehensive plan was adopted by the Board of Commissioners in 1981 and has been amended several times. Pertinent policies include:

Goal 3 Provide land allocations to encourage a wide variety of safe and affordable housing.

Policy 7. The Board of Commissioners shall....protect the public and private interest by assuming primary jurisdiction in the following areas authorized by law:

- a. the partitioning or subdividing of land;
- b. the creation of new roads or streets for development purposes.

The authorization of land uses shall be coordinated with the regulations of the Oregon Department of Transportation...

Goal 4 Plan and develop facilities and services that are needed, and can be afforded, by the residents of the county.

Policy 4. It shall be the policy of the Board of County Commissioners to encourage and facilitate the development of a transportation master plan for bridges and roads coordinated with City, State and Federal agencies.

Policy 5. The County shall continue to maintain and improved the appropriate airport facilities with Josephine County. Zoning standards shall be established to prevent the development of incompatible uses or hazardous structures within the flight approach zones. Any development and expansion will be in accordance with applicable airport master plans.

Policy 10. The physically handicapped and transportation disadvantaged shall be considered in the design of transportation facilities and alternative transportation modes.

Goal 9 Development and preservation of energy

Policy 3. The Board of County Commissioners shall encourage construction of safety paths with the reconstruction or development of new roads or streets between major shopping centers and recreational and educational facilities.

The Implementation section of the Comprehensive Plan assigns planning responsibilities to various county agencies. Among the responsibilities of the Public Works Department are:

2. The Public Works Department shall develop and maintain a transportation plan for the County. This plan shall include all forms of travel to include public transportation and airports.

6. The Department shall maintain and recommend to the Board of County Commissioners standards for the design of the County wide road system, to include established and proposed roads. The system shall be designed to take into account the need for safe and efficient movement of people, both on roads and safety paths, services, and goods; adequate design capacity to handle traffic loads generated by various areas of the County, and to avoid disruption of agricultural units or residential area. There should also be an ongoing program which will reduce road associated dust.

7. The Department shall devise, in cooperation with the incorporated cities and the Oregon State Highway Division, efficient by-pass routes around congested commercial areas within established urban growth boundaries. Such by-pass routes should not disrupt rural areas or encourage the unnecessary expansion of urban uses into rural areas. The Department should also seek to develop complementary road systems to avoid routing truck traffic through residential areas. An environmental assessment, including review of the social and economic factors, shall accompany all proposals, which shall go through the public hearing process. Such bypass routes and complementary road systems shall be consistent with adopted transportation plans.

Several roads within the city limits of Cave Junction are under Josephine County's jurisdiction. The following table includes County jurisdiction streets inside the city limits.

<b>Street</b>	<b>From</b>	<b>To</b>
Laurel Road	Redwood Highway	Oregon Caves Highway
Old Stage Road	Laurel Road	South edge of UGB
Hamilton Ave <sup>1</sup>	Barlow Street	Redwood Highway
River Street	Shadow Brook Drive	Laurel Road
Daisy Hill Road <sup>2</sup>	River Street	End
Hanby Lane <sup>2</sup>	Old Stage	End

<sup>1</sup> Hamilton Lane is jointly administered by the County and City, but only the City provides minimal maintenance.

<sup>2</sup>Daisy Hill Road and Hanby Lane are public right-of-way, non-maintained.

A joint management agreement between Cave Junction and Josephine County was approved November 17, 1980, outlining the responsibility of one jurisdiction to provide the opportunity for

participation by the other prior to taking action on a matter. This agreement requires joint participation when developing or amending comprehensive or functional plans.

### **The Enterprise Communities of Josephine County**

The Illinois Valley, composed of the Selma and Cave Junction census tracts, was designated an Enterprise Zone in 1990. In response to this designation, strategies and action plans were proposed to improve the economic health of the valley:

- < Business Goal Strategy 3 is to create a portion of family wage jobs in the Josephine County Enterprise Communities by attracting new employers and developing new employment opportunities.
  - < Action Plan C is to support the development of physical infrastructure at the Illinois Valley airport, and in each community within the Enterprise Community.
- < The Infrastructure Goal is to develop new and improve existing infrastructure that will support responsible growth.
  - < Strategy 1 seeks to improve and expand the sewer, water, natural gas, and street systems in the Enterprise Communities.
  - < Strategy 2 is to support and participate in the upcoming Josephine County Transportation Element and Plan update process.
  - < Action D calls for signal project improvements at:
    - Hwy 199 and River Street
    - Hwy 199 and Laurel Road, (including a left turn refuge lane)
  - < Strategy 3 is to determine an appropriate industrial location in the Illinois Valley and develop the necessary infrastructure to serve that site.

## **OTHER TRANSPORTATION STUDIES**

### **Highway 199 Corridor Study**

A contract was issued to JRH to prepare a study of the Highway 199 corridor from Grants Pass to the California state line. The study was published on May 17, 2000.

## **TPR COMPLIANCE ISSUES**

Appendix A is a review of the city's status regarding compliance with the Transportation Planning Rule.

## **EXISTING TRANSPORTATION SYSTEMS**

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Street network facilities, bike paths, and sidewalks are included in the attached Cave Junction Roadway Inventory. Other existing system features to be reviewed are public transportation services, air, rail, water, and pipeline transportation, and environmental constraints, both natural and cultural.



## **Public Transportation**

Public transportation was identified through a citizen involvement process as a needed service for Cave Junction. Two factors have hindered implementation of this service. The City's small population will not support local public transportation services. The expense of services to Grants Pass is greatly increased because of the distance between the two cities.

Currently there is no local public transportation provided within Cave Junction. Once a week, Josephine County Community Services provides Illinois Valley senior citizens transportation to different local destinations and to Grants Pass. A \$.25 fee is charged each way for local trips, with a suggested donation of \$2 for trips into Grants Pass. This service is available only to individuals 60 years or older. The Handicap Awareness Support League (HASL) operates a five passenger wheelchair van with a volunteer driver, but has experienced a drop in ridership that is attributed, in part, to the accessibility of the Community Services van.

## **Air Transportation**

The main airport for commercial and freight service in southwest Oregon is the Rogue Valley International Airport in Medford, 58 miles from Cave Junction. The airport is located approximately half way between Seattle and San Francisco, just off Interstate 5, the major north south corridor for the west coast (Oregon, California, and Washington). The airport occupies 989 acres of land within the Medford city limits.

Today, the Rogue Valley International Airport provides transit for industrial and agricultural freight, business travelers, recreation seekers, and vacationers. In January of 1995, the Rogue Valley International Airport was designated a foreign trade zone and became an international point of entry.

The Illinois Valley Airport is located approximately four miles south of Cave Junction, and is designated a Class 3 airport by the State. The facility is situated on 175 acres, and provides general aviation services to Cave Junction and the Illinois Valley. The airport currently provides little in the way of services or amenities (e.g., aviation fuel, car rental). Future expansion efforts should consider the need for such services in order to make the airport a viable transportation facility for the area.

The Airport's main runway is 5,200 feet long by 75 feet wide. The Oregon Continuous Aviation System Plan (ODOT, January 1994) recommends that the airport evaluate its ability to extend the runway an additional 300 feet and provide lighting as identified in the Airport system plan. This report also recommended construction of a parallel taxiway to enhance the safety and operational flexibility of the airport.

## **Rail Services**

There are currently no rail lines in the Illinois Valley. The nearest rail facilities are located in Grants Pass and are limited primarily to freight services.

**Pipeline Transportation**

There are no major pipeline transportation facilities in the study area. The Northwest Pipeline Corporation and C. P. National have major distribution lines in the Grants Pass area, but these facilities do not extend to the Illinois Valley.

**Water Transportation**

Water is not a means of transportation in Cave Junction. Water recreation exists on the Illinois River.

## **Environmental Constraints**

Goal 5 requires inventories of the following resources:

Riparian corridors - water areas, fish habitat, adjacent riparian area, and wetlands within the riparian area boundary. "Riparian area" is the area adjacent to a river, lake, or stream, consisting of the area of transition from an aquatic ecosystem to a terrestrial system.

The Illinois River is the primary corridor in the study area and, because it has an annual stream flow of 1209 CFS, the required setback from the riverbank is 75 feet. Two minor drainages are also mapped as wetlands, and would require a 50-foot setback.

Wetland - an area that is inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

The National Wetlands Inventory indicates that most wetland features are located along the Illinois River. Very little ponding occurs in the city, with only two mapped palustrine features. One is located in the southeast corner of the city near the intersection of Laurel Road and Caves Highway, while the other is along an irrigation lateral in the southwest area near Schumacher Street and Daisy Hill Road. Construction in these areas is subject to approval of the Division of State Lands.

A stormwater master plan is being conducted, and research for this plan may identify additional wetlands.

Wildlife habitat - an area upon which wildlife depend in order to meet their requirements for food, water, shelter, and reproduction. Examples include wildlife migration corridors, big game winter range, and nesting and roosting sites.

The Oregon Department of Fish and Wildlife has provided the City with a list of threatened and endangered species likely to exist in the Cave Junction UGB. "Sensitive critical", threatened or endangered species include:

- Western Pond Turtle
- Lewis Woodpecker
- Northern Goshawk
- Pileated Woodpecker
- Peregrine Falcon
- Bald Eagle
- Townsend's Big Eared Bat
- Fall Chinook

### Federal Wild and Scenic Rivers

A portion of the Illinois River downstream from Cave Junction is a federally designated wild and scenic river. This designation does not directly affect the city.

### Oregon Scenic Waterways

The portion of the Illinois River bordering Cave Junction is not a scenic waterway.

Groundwater Resources - any water, except capillary moisture, beneath the land surface or the bed of any stream, lake, reservoir, or other body of surface water.

Groundwater resources are a serious concern with respect to population growth in the urban growth boundary, but they are not significantly affected by specific proposed transportation projects.

### Oregon Approved Recreation Trails

A trail designated by rule adopted by the Oregon Parks and Recreation Commission (OPRC). There are no hiking or biking trails meeting this definition in the planning area.

Natural Areas B areas listed in the Oregon State Register of Natural Heritage Resources. There are no ecologically or significant natural areas under the jurisdiction of the Nature Conservancy in the UGB, although several threatened or endangered plant species exist within the UGB.

### Wilderness Areas

The city is a commercial center serving the Kalmiopsis Wilderness, which is one of the natural attractions cited in the strategic plan as a magnet for tourists.

### Mineral and Aggregate Resources.

There are no inventoried mineral or aggregate resource sites in the Cave Junction Urban Growth Boundary; however, the Illinois River is noted as an important gravel resource.

Energy Sources B includes naturally occurring locations, accumulations, or deposits of: natural gas, surface water (i.e., dam sites) geothermal, solar, and wind areas. Solar energy is the only identified source in the UGB.

### Historic Resources B buildings, structures, objects, sites, or districts

The City's comprehensive plan states that Kerby, rather than Cave Junction, was the early settlement in the Illinois Valley. As a result, there are no historic buildings or sites in the planning area; none are listed on the Statewide Inventory of Historic Places.

Open Space B parks, forests, wildlife preserves, nature reservations or sanctuaries, and public or private golf courses.

The largest open space in the planning area is the Illinois Valley Golf Course, but just across the river from the city limits is the 368-acre Illinois River Forks State Park. Jubilee Park is a developed 11 acre city park, and a 40 acre site known as Old Stage Park has recently been acquired.

Scenic Views and Sites - lands valued for aesthetic purposes.

The city is located in a scenic valley, affording residents views of the mountains that surround the valley. The Illinois River also borders the planning area. None of the sites have been inventoried as a Goal 5 resource.

## **GROWTH ISSUES**

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In Cave Junction, it will be important to coordinate facility improvements with new development. The location of new streets can have a significant impact on the City over time. Failure to plan for new roads can lead to an inadequate street system. "Fixing" these problems is significantly more expensive and difficult after development has occurred.

## **POPULATION AND EMPLOYMENT FORECASTS**

### **POPULATION 1950-PRESENT**

Like many communities throughout Oregon, Cave Junction has seen ebbs and flows in population growth. The primary period of growth was in the 1970s, when the city grew at an average annual rate of 9.9 percent, but growth was also rapid in the 1960s (averaging 6.7 percent per year). Since 1980, the rate has slowed significantly, averaging 1.7 percent in the 1980s, although as in earlier decades this exceeded the county and state growth rates. The rate slipped to 1.6 percent from 1990 through 1998, falling behind county and state rates.

<u>Year</u>	<u>Population</u>	<u>Percent Increase</u>	<u>Year</u>	<u>Population</u>	<u>Percent Increase</u>
1950	283		1985	1,150	3.6
1960	248		1989	1,235	-1.2
1970	415		1990	1,126	-8.8
1971	425	2.4	1991	1,150	2.1
1972	445	4.7	1992	1,165	1.3
1973	550	23.6	1993	1,200	3.0
1974	595	8.2	1994	1,225	2.1
1975	650	9.2	1995	1,265	3.3
1976	697	7.2	1996	1,300	2.8
1977	840	20.5	1997	1,435	10.4
1978	1,010	20.0	1998	1,425	-0.7
1979	1,055	4.0	1999	1,415	-0.7
1980	1,040	-1.0	2000 (Census)	1,363	-3.7
1981	1,080	4.0			
1982	1,080	0.0			
1983	1,085	0.5			
1984	1,110	2.3			

**FIGURE 2: AVERAGE ANNUAL PERCENT INCREASE PER DECADE**

Decade	1951-60	1961-70	1971-80	1981-90	1991-98
Cave Junction	-1.2	6.7	9.9	1.7	1.6
Josephine County	Not available	NA	5.0	.64	2.48
Oregon	NA	NA	2.32	.82	1.81

Source for county and state: Office of Economic Analysis

A July 1999 draft of the revised Cave Junction Comprehensive Plan anticipates a 1.8 percent annual increase through 2017, projecting a population of 1,800 residents. Population growth is expected to be based on several assumptions:

- § Continued development and diversification as the major service center for the Illinois Valley.
- § Travel and tourism to increase at the rate of statewide population growth
- § Decreasing energy cost and resource restrictions on residential development.

The City's projection of 1,800 does not differ significantly from a population and employment forecast for Josephine County completed by the Rogue Valley Council of Governments in April 1997. Using a linear regression model reflecting growth from 1940 to 1995, the projected population for Cave Junction in 2015 is 1,755, increasing to 1,880 by 2020. Using the same model, total Josephine County population is expected to reach 88,636 in 2015 and 93,626 in 2020. The RVCOG projections for the entire county are similar to the projections prepared by the Oregon Department of Administrative Services Office of Economic Analysis, which anticipates 89,596 residents in 2015 and 93,669 in 2020.

Household size in Cave Junction has followed state and national trends of fewer persons per household:

**FIGURE 3: PERSONS PER HOUSEHOLD**

Census Year	Persons Per Household	
	Cave Junction	Josephine County
1970	2.61	2.90
1980	2.25	2.65
1990	2.13	2.46

Source: U. S. Decennial Census

Population projections were included in plans for wastewater and water systems that are nearing completion of construction. A Wastewater Facilities Report completed in April 1994 by BST Associates, Inc. projected a population of 4400 in 2014. That study was followed by a Water System Master Plan completed in February 1995 by Lee Engineering. The study noted that growth had been slowed because of a hold placed on new sewer connections until the wastewater

treatment capacity was increased, but a strong surge of growth could be expected when connections would again be permitted. The Lee Engineering study anticipated a population of 4,600 people by the year 2015. Both studies reflected an annual growth rate of approximately 5 percent.

In 1995, the Oregon State Legislature adopted Oregon Revised Statute 195.036, which states that coordinating bodies, in this case Josephine County, shall establish and maintain population forecasts for all local governments within a county's boundaries. Cave Junction and Grants Pass are the only incorporated cities in Josephine County.

## **EMPLOYMENT FORECASTS**

The Oregon Employment Department publishes labor trends for each county in Oregon. The report is published every month and includes a table showing changes in the civilian labor force. Economic indicators cover unemployment rates and the Consumer Price Index. Statewide and regional factors are also drawn upon in an effort to reliably portray the economic health of the region which, for this area, includes Josephine and Jackson counties.

The December 1998 issue of "Labor Trends" includes an article about a short-term employment growth forecast for Oregon prepared by Arizona State University. Employment growth met or exceeded 4 percent from 1994 through 1996, but fell to 3.4 percent in 1997. The forecasted growth rate for 1998 was 2.6 percent and for 1999, it is expected to drop to 2.1 percent. (Source: Western Blue Chip Forecast). The slower economic growth is expected to be reflected in slower population growth.

November 1998 unemployment in Josephine County was 8.6 percent, up from 8.5 percent in November 1997. The county has a rate consistently higher than the statewide unemployment rate, which was 5.4 percent in November 1998. While the statewide rate is nearly identical to 1988, the county's rate has risen from 6.5 percent. Part of the unemployment increase can be attributed to a significant reduction in lumber industry jobs, falling from 2,190 in 1988 to 1,380 in 1998. Where lumber industry jobs represented 8.8 percent of the total employment in 1988, the percent has dropped to 5.1 percent in 1998. The Employment Division estimated that the unemployment rate in the Illinois Valley was over 17 percent because of a downturn in timber-related jobs.

Census data in 1990 showed that 37 percent of valley residents commute more than 30 minutes to their work sites; countywide, only 20 percent of residents have a commuting time exceeding 30 minutes. The five largest private sector employers in the Illinois Valley are Rough and Ready Lumber company (140 employees), Wild River Brewing and Pizza (100), Fire Mountain Gems (80), Bridgeview Winery (30), and Taylor's Sausage (11). The top ten occupations reported by city residents in the 1990 Census were:

<u>Rank</u>	<u>Occupation (number of employees)</u>	<u>County Rank</u>
1)	Retail trade (46)	1
2)	Other professional and related services (37)	6
3)	Manufacturing, durable goods (33)	2
4)	Educational services (29)	4

5)	Agriculture, forestry and fisheries (17)	8
6)	Health services (15)	3
7)	Public administration (15)	12
8)	Manufacturing, nondurable goods (14)	14
9)	Finance, insurance and real estate (14)	7
1)	Business and repair services (14)	9

Cave Junction issues business licenses that are renewed on an annual basis. City records indicate that 615 employees work within the city limits, although not all employees live in Cave Junction. Non-governmental occupations with more than 20 employees are food (242), retail (70), auto (54), rentals (37), medical (30), banking (26), real estate (22), and motel/food (21).

The Office of Economic Analysis estimated a total of nearly 20,000 non-agricultural employees in Josephine County. The OEA projects a county-wide increase of 5,810 non-agricultural jobs from 1995 to 2015, and a total of 6,435 new jobs by 2020. The average annual growth rate is expected to lag behind the statewide growth rate during this period.

One of the assumptions for the five percent population growth rate cited in the draft comprehensive plan is that travel and tourism will increase at the rate of statewide population growth. Tourism related employment accounted for just 4.5 percent of jobs in Josephine County in 1992.

The Illinois Valley was designated an Enterprise Community in 1990. Enterprise communities are established in areas that are economically distressed, lagging behind national trends. The 1990 median per capita income for Cave Junction was \$7,753, while the state median was \$13,418. A 1994 study conducted by the Oregon Economic Development Department showed the median per capita income in Josephine County was less than 80 percent of the statewide average. The 105 enterprise communities throughout the nation are eligible to receive tax-exempt bond financing that offers lower rates than conventional financing to finance business property and land, renovations, or expansions. The program is built on four principles:

- 1) Economic Opportunity
- 2) Sustainable Community Development
- 3) Community-based Partnerships
- 4) Strategic Vision for Change

The Josephine County Enterprise Communities Strategic Plan was developed in 1994, and concluded that future job growth is likely to be strongest in employment sectors providing services to tourists and retirees. The Business Goal was to "support and encourage the development of family wage jobs capable of sustaining family households throughout the Enterprise Communities." The plan includes the following strategies for economic growth, each of which also includes implementation actions:

1. Create family wage jobs in the Enterprise Communities by expanding existing business in the area.



2. Create a viable destination industry in the Illinois Valley and tourism information/resources throughout the Enterprise Communities that will add seasonal jobs by increasing the number of visitors and their length of stay.
3. Create a portion of family wage jobs in the Josephine County Enterprise Communities by attracting new employers and developing new employment opportunities.

The Illinois Valley Community Response Team published an update of their strategic plan in June 1998 and clarified the original goal to read, "Create a net gain of 150 new jobs in the Illinois Valley by the year 2000." The strategies were also modified:

1. Produce new jobs in the Illinois Valley by creating a viable tourism destination industry. Increase visitor length of stay, develop Eco-Tourism attraction and market the area's unique combination of rugged charm and character. Many of the 13 action plans support outdoor uses highlighting the Illinois River and development of a new trail system and support services in the valley.
2. Create and retain family wage jobs by expanding existing businesses. The action plans support attracting and enhancing forest products businesses in the valley, providing markets for local produce, and developing outlets for cottage industries.
3. Create family wage jobs by attracting new businesses. Actions for Strategy 3 include support for an area-wide market analysis for commercial, industrial, and existing business needs, and support for the Illinois Valley Industrial Park at the airstrip.

The Strategic Plan also includes strategies for improving and expanding the sewer, water, street systems, and developing the parks and recreation facilities in Cave Junction. Developing the Illinois Valley Airport is also a priority, and a consultant, Wes Reynolds, investigated options and provided recommendations for increasing the economic viability of the facility.

The ability of the Illinois Valley, and Cave Junction in particular, to attract family wage jobs will affect the extent of population growth and the need for expanded transportation facilities.

## **TRANSPORTATION SYSTEM NEEDS:**

This section summarizes the traffic analysis and planning work performed for this project. The first section reviews meetings regarding traffic concerns of the community and staff. The second section presents the engineer's assessment of existing traffic conditions along the major roadways in Cave Junction. The third section presents the assumptions used to estimate future traffic volumes for the 20 year (2018) planning horizon and the analysis of this future scenario. The final section presents some recommendations based on the results of the analyses and observations

### **CITY VISIT AND MEETINGS**

During the weekend of September 3-5, 1998, Stein Engineering visited Cave Junction and met with City staff. This was during the Labor Day Holiday and there was a festival in the city with the main events occurring on Saturday. Transportation concerns throughout the city were discussed. In addition to overall concerns about growth in traffic along Hwy 199, there were several specific concerns:

1. River Street at Hwy 199: This street provides access to the elementary school to the west and the middle and high school to the east. Public concern was expressed about access to social service facilities, such as the IV Pool, Senior Center, Family Services Center, Head Start and Early Head Start, located on E. River Street. City staff is concerned that this intersection does not have a traffic signal or turn lanes. Many drivers as well as the school buses avoid this intersection and use Lister Street instead. Past analyses have concluded that traffic volumes are too low to meet signal warrants, but these low volumes may be as the result of people avoiding it. There is also concern about traffic operations along Hwy 199 at River Street, because this is the transition section from 2 (north side) to 4 lanes (south side).
2. Lister Street at Hwy 199: This street has most of the major downtown land uses along it (i.e. Bank, Post Office, and City Hall). It has a signal, but no left turn lane. In reviewing this, ODOT has told the City that a left turn lane is feasible if parking along the east side of Hwy 199 is removed (about 13-16 spaces). The City staff has no problem with this, but local merchants have concerns that parking in front of their stores will be eliminated.
3. Laurel Road at Hwy 199: This is the first intersection as one enters Cave Junction from the north. Vehicle speeds along this section are very high as drivers transition from a rural highway environment to an urban environment. (The speed limit was recently reduced to 45 mph.) Another concern is the lack of a southbound left turn lane. Initial evaluation of this revealed that a constraint to this improvement is the transition to the south and its close proximity to the bridge abutment. Also, a high percent of traffic at this intersection is large trucks, which tend to exacerbate the speeding and left turn problems.
4. Roadways on the east side of Cave Junction: Along the east side of Cave Junction (i.e. along Old Stage and Laurel Road), there are many gaps in the jurisdiction of the roadway

network. These gaps make it difficult to develop a comprehensive roadway plan as well as maintaining these roadways.

The engineer was able to observe all the issues noted above. The only exception was traffic generated by the schools. This was due to the fact that school was not in session. Overall, traffic operations along Hwy 199 appeared to operate at Level of Service C (see later section for definitions), as most side street vehicles had only minor delays. Vehicle queuing along Hwy 199 did occur, but the lines were of short duration. The need for a left turn lane at Laurel Road and Lister Street was also noted.

### **EXISTING TRAFFIC CONDITIONS**

Figure 4 presents the roadway network in the vicinity of Cave Junction. In addition, this map also shows the location of the schools and major government buildings. Figure 5 presents the lane configurations and traffic control at most of the major intersections in Cave Junction. Figure 6 presents the results of weekday PM peak hour traffic counts performed throughout the City during the last 12 months. Traffic volumes at a few of these intersections were estimated. The engineer has also obtained past traffic counts. Comparison of the recent and past counts revealed that traffic throughout the city has not increased significantly during the last few years. Figure 7 presents a summary of accident data compiled for the major intersections throughout Cave Junction. Most intersections had only a few accidents during the three-year period from 1996 to 1998. Notably, the highest accident location was at Lister Street and Hwy 199, which had 9 reported accidents, 7 involving vehicles making turns.

Intersection capacity analyses were performed based on the existing traffic volumes shown in Figure 6. Intersection operational analyses were conducted using the procedures in the 1994 Highway Capacity Manual (HCM) and Highway Capacity Software (HCS) for evaluating signalized and unsignalized intersections. These procedures describe traffic operations at an intersection in terms of its Volume over Capacity (V/C) Figure 8 presents the results of these analyses. All the intersections appear to operate V/C at V/C .75 or better during the critical PM peak hour.









**FIGURE 8: 1998/1999 Current Levels of Service**

Intersection	PM Peak Hour	
	Signal Control	
	Avg. Vehicle Delay (Sec./Veh)	V/C Ratio
<b>Lister St/Hwy 199</b>	<b>8.3</b>	<b>0.25</b>
<b>Caves Hwy/Hwy 199</b>	<b>12.0</b>	<b>0.44</b>
	Stop Control	
	Avg. Vehicle Delay (Sec./Veh)	V/C Ratio
	<b>Laurel Rd/Hwy 199</b> (Critical Approach: WB)	<b>4.4</b>
<b>River St/Hwy 199</b> (Critical Approach: WB)	<b>9.3</b>	<b>0.13</b>
<b>River St/Laurel Rd</b> (Critical Approach: EB)	<b>4.1</b>	<b>0.06</b>
<b>Caves Hwy/Laurel Rd</b> (Critical Approach: SB)	<b>6.3</b>	<b>0.09</b>
<b>Rockydale Rd/Hwy 199</b> (Critical Approach: WB)	<b>5.6</b>	<b>0.06</b>

**FUTURE 2018 TRAFFIC SCENARIO**

This section presents the methodology for estimating future 2018 traffic volumes and analysis of this future traffic scenario.

**Estimate of Future Traffic Volumes**

The estimate of future traffic volumes is based on several assumptions regarding the growth in traffic thru the area, growth in the population, and development activities in Cave Junction. Furthermore, these factors must be translated into vehicle trips. To conduct these analyses, an area network model was developed for Cave Junction using the *Traffix* program. This model includes the major roadway and zones for development. Figure 9 shows the *Traffix* model that was developed for this project. Each of these components is discussed below.







**Growth in through traffic:** Historical traffic counts and trends are somewhat conflicting. Peak hour counts do not indicate much fluctuation in traffic over the last several years. By comparing ODOT's daily traffic numbers, some indicate large increases while others decline. This could simply reflect the day chosen and any temporary fluctuations. Even comparing Labor Day counts with others throughout the year has not revealed any major fluctuations in traffic. To be conservative, that is to overstate any traffic congestion, a general growth factor of 2 percent per year in through traffic along Hwy 199, Laurel Road, and Caves Hwy will be used. Thus, to estimate future 2018 volumes, existing through traffic volumes in Figure 6 were increased by 40 percent. For minor turn movements, a 10 percent growth factor was applied. The resulting traffic volumes are shown on Figure 10.

**Future population:** The current population of Cave Junction is about 1,370. As stated earlier, past trends have indicated that the population could increase in this area as much as 5 percent per year, although this may not be the most recent trend. Applying this factor would be a future 20-year population of about 3,500, which is very optimistic. To make the analysis conservative, Stein Engineering decided to use the higher value to test the roadway network. Thus, an overall population increase of about 1,500 will be used.

**Growth in residential units:** Based on the growth estimates of future population, the first step is to translate this into housing units or acres of development. Using an average household size of 2.5, a population growth of 1,500 would translate into 600 housing units. The next step is to specify a development density. Cave Junction has two basic residential categories:

1. SR/Single Family Residential District Minimum: lot size of 7,000 gross square feet (GSF) with coverage of a maximum of 30 percent. This would equate to about at least 6 units per acre.
2. MR/Multiple Residential District: Two-family units require at least 9,000 GSF and 1,000 Gross Square Feet for each additional unit. This would equate to about 35 units per acre assuming that other development requirements could be met.

Discussions with City staff revealed that a significant portion of the residents in Cave Junction are older citizens who retire to the area. In addition, a substantial portion of the housing inventory are manufactured home parks. Finally, a substantial portion of multi-family housing (apartments) in Cave Junction is subsidized. Based on these trends, it was assumed the growth in residential development for Cave Junction would be 20 percent multi-family, 40 percent traditional single family home subdivisions, and 40 percent manufactured/mobile home park units. This would equate to the following:

<b>Housing Type</b>	<b>Units</b>	<b>Acres</b>
Multi-Family	120	3.5
SF Subdivision	240	40
Manufactured/Mobile Homes	240	Less than 40

These units were assigned to the City based on analysis of vacant land and developments that have been approved and proposed. Overall, few major developments have occurred in Cave

Junction over the last 5 years. Consequently, it is likely these sites will be the first to develop or, at least, nearby sites. These sites include:

- 1) Remaining 160 units of an approved Mobile Home Park along Schumacher
- 2) Proposed 125 unit Mobile Home Park just east of the Laurel Rd/Hwy 199 intersection
- 3) Proposed 125 unit single family subdivision along River Road, west of Hwy 199
- 4) Proposed 30-unit single family subdivision along Laurel Road, north of Caves Hwy.

These developments account for most of the estimated future growth for Cave Junction. Further, based on the location of the schools and the park, it is likely that the remaining single family units and multi-family units will be developed near these facilities on the east portion of Cave Junction. Vehicle trips generated by these developments were estimated using standard trip rates in the ITE Trip Generation Report. Figure 11 shows the results of these calculations. It should be noted that these rates have not been adjusted (i.e., reduced) for the large percentage of older residents who traditionally make fewer than average peak hour trips.

**FIGURE 11: Estimates of Weekday Trip Generation for Future Residential Developments**

Land Use	Daily Trips	PM Peak Hour		
		Total	In	Out
160 Remaining Mobile Home Lots	770	90	55	35
125 Unit Mobile Home Park	600	71	44	27
125 SF Home Subdivision	1,196	125	80	45
120 Remaining SF Homes	1,148	120	75	45
120 Multi-Family/Apartment Units	795	75	50	25

**Growth in other land uses:** A majority of the vacant land in Cave Junction is zoned residential, but there are areas designated commercial/business. Most of the commercial areas are along Hwy 199, at the north end of the city. It is likely that these land parcels will develop into local-serving/pass-by commercial uses. Most of the traffic to these uses will not be new to the area, but will reflect the needs of the current community and its future growth. In discussions with staff, it was agreed that for this study, we would assume that one major new business/manufacture might occur along Hwy 199 at the north section of the City that would have approximately 50 employees. It was assumed that this use will have 50 PM peak hour trips (40 inbound and 10 outbound). If the overall growth in residential projected above occurs, it will generate the need for more retail uses in the downtown area. This will be accounted for by assigning a large percent of peak hour residential trips to this area.

**Assignment of Development Generated Trips onto the Roadway Network:** Vehicle Trips generated by the potential future developments discussed above were assigned to the roadway system based on analysis of existing traffic patterns and staff knowledge of these patterns. Existing traffic volumes were evaluated to determine which way drivers turn as they travel through the major intersections shown in Figure 6. From this information, it was assumed that about 45 percent of trips would be to/from the north along Hwy 199, 30 percent would be to/from the downtown area, 10 percent would be to/from east of Cave Junction along Caves Hwy, and 15 percent would be to/from the south along Hwy 199 and Rockydale Road. These percentages and the actual assignment of these vehicle trips are shown in Figure 13.

**Analysis of Total Future 2018 Traffic Scenarios and Recommendations**

Total future 2018 traffic volumes were estimated by adding the future background traffic volumes shown in Figure 10 to the development generated traffic volumes shown in Figure 13. The resulting future total 2018 traffic volumes are presented in Figure 14. It should be noted that these volumes are based on many conservative traffic assumptions that would tend to overstate traffic conditions, including a high population growth rate and trip rates for new developments.

Intersection capacity analysis was performed for two future scenarios: background 2018 and future total 2018 with potential developments: Results of this analysis are shown in the table below and indicate that, overall, the existing roadway network of Cave Junction can accommodate future traffic volumes. All study area intersections will operate at V/C .62 or better. The intersection of Hwy 199 and River Street is approaching capacity as an unsignalized intersection. Also, at the intersection of Hwy 199 and Laurel Road, additional analysis found that even the background traffic scenario warrants a separate southbound left turn at this intersection.

**FIGURE 12: Results of Future 2018 Capacity Analyses**

Intersection	Background		Background + Developments	
	<b>Signalized Intersection</b>			
	Avg. Vehicle Delay (Sec/Veh)	V/C Ratio	Avg. Vehicle Delay (Sec/Veh)	V/C Ratio
<b>Lister St/Hwy 199</b>	5.2	0.34	5.3	0.44
<b>Caves Hwy/Hwy 199</b>	14.5	0.59	15.0	0.62
	<b>Minor Street Stop Control</b>			
	Avg. Vehicle Delay (Sec/Veh)	V/C Ratio	Avg. Vehicle Delay (Sec/Veh)	V/C Ratio
<b>Laurel Rd/Hwy 199</b>	5.3	0.03	13.2	0.04
<b>River St/Hwy 199</b>	15.0	0.22	23.9	0.36

<b>River St/Laurel Rd</b>	4.6	0.07	4.9	0.08
<b>Cave Hwy/Laurel Rd</b>	9.0	0.17	10.1	0.21
<b>Rockydale Rd/Hwy 199</b>	6.8	0.13	7.1	0.15







Throughout this project, several other intersection and roadway network improvements have been discussed and should be considered to address the transportation needs of Cave Junction:

1. Westbound Caves Hwy at Hwy 199: This approach is wide enough to accommodate three lanes (one eastbound and two westbound). However, it is not striped and is of limited length. This approach should be formally striped for three lanes and the right turn lane might be upgraded.
2. Network Improvements on the west side of Cave Junction: On the west side of Hwy 199, efforts should be made to add key links to the network that might include extending Watkins to the west to intersect with Schumacher, a north-south connection at the west ends of Schumacher and River Streets, and network streets north of River St that intersect River St and Hwy 199.
3. Network improvements on the east side of Cave Junction: On the east side of Hwy 199, efforts should be made to add key links to the network that would connect the major streets between Rivers Street and Caves Hwy. This might include an extension of Fir Drive to Laurel Road and a new street connection between Junction Avenue and Old Stage Road.

#### **SUMMARY AND CONCLUSIONS**

Overall, all the major intersections in Cave Junction currently operate at acceptable Levels of Service. Analysis of future 2018 traffic volumes, based on fairly aggressive growth trends, found that these intersections will continue to operate at acceptable Levels of Service (V/C of .75 or better). At the same time several improvements have been identified that are needed to address existing concerns, and/or enhance traffic operations throughout the City. These projects are not listed in any priority order except that 1 through 4 should be incorporated into the City's Capital Facilities Planning process, while the remaining are overall network improvements that have lower priority at this time and could be incorporated into the long range plan for Cave Junction. They should also be considered if nearby land parcels are developed. Finally, the cost estimates shown below are for general planning and are based on general estimates of right-of-way and roadway section costs.

Inclusion of an improvement in the TSP does not represent a commitment by ODOT to fund, allow, or construct the project. Projects on the State Highway System that are contained in the TSP are not considered "planned" projects until they are programmed into the Statewide Transportation program (STIP). As such, projects proposed in the TSP that are located on a State highway cannot be considered mitigated for future development or land use actions until they are programmed into the STIP. Highway projects that are programmed to be constructed may have to be altered or canceled at a later time to meet changing budgets or unanticipated conditions such as environmental constraints.

All identified improvements connecting to or impacting Highway 199 will have to meet state warrants and the approval of the ODOT's District Engineer and Statewide Traffic Engineer.

Roadway improvement projects identified include:

- 1) **Southbound Left turn lane along Hwy 199 at Laurel Road:** This improvement is needed to accommodate existing and future background volumes as traffic along Hwy 199 increases. Also, a traffic signal will be needed if a major commercial development occurs on the large parcels in the immediate vicinity of this intersection. This improvement is rather straightforward except that there is a bridge to the south over George Creek that would have to be widened to accommodate the transition of northbound traffic as the roadway widens to provide the left turn land. This improvement was estimated to cost approximately \$1 million. This includes roadway construction and engineering costs and minor right-of-way purchases.
- 2) **Left turn lanes along Hwy 199 at River Street and Lister Street:** These improvements should be planned for as traffic grows along Hwy 199. Even though the model estimates these intersections will operate at acceptable LOS, it is not sensitive to localized traffic operational issues. Existing volumes meet warrants for providing a left turn lane at these intersections for 4-lane sections. This would involve restriping the roadway and reconfiguring on-street parking. Formal striping plans and approval from the state traffic engineer are required. (Approximate cost: \$50,000)
- 3) **Potential Traffic Signal at River Street at Hwy 199:** Even though all intersections operate at LOS D or better, the intersection of River Street and Highway 199 will approach capacity. The engineering analysis did not fully reflect the school time periods when traffic along River Street is heaviest. Analysis indicates that this intersection should be monitored for potential traffic operational problems. If a new traffic signal were installed at this location, the cost would be \$150,000 for design and construction. If a signal were moved from another location, this cost would be significantly less.
- 4) **Westbound Caves Hwy at Hwy 199:** This approach is wide enough to accommodate three lanes (one eastbound and two westbound). However, it is not striped and is of limited length. This approach should be formally striped for three lanes and the right turn lane might be upgraded. Some reconfiguration of the island at this intersection will be needed and the northbound sign relocated. It appears that very little right-of-way will be needed. The total cost should be \$10,000-\$15,000 depending on how much roadside work and reconfiguration will actually be needed. (ODOT considers this figure low.)
- 5) **Network improvements throughout Cave Junction:** As land develops throughout the city, efforts should be made to add key links to the roadway network. To this end, city staff and citizens have reviewed the existing roadway network, already dedicated rights-of-way, potential future development, and layout of parcels and geographic features to identify these sections. The result of this effort identified thirteen network improvements that should be considered in the future. These improvements are shown in Figure 15 and described in Figure 16. They ranged from short sections connecting downtown streets to long sections to add a north-south collector on the west side of Cave Junction. For the most part, these improvements will occur in response to new developments and be constructed by the development community. Regardless, the costs

associated with implementing these improvements were estimated based on several assumptions detailed in Figure 16. It should be noted that these estimates do not include extension of utilities and storm drainage to serve these areas.

Additional planning is currently underway for street and pedestrian friendly facility improvements, to be added to the portion of Highway 199 that extends through the city.

Options were presented to the public in June, 2001, with final recommendations expected in August. ODOT is evaluating these proposals, which were developed by CIDA of Portland, and will provide an analysis and input into the suggested alternatives. Any improvement option that is selected for Highway 199 will require concurrence with ODOT and must be amended into the Transportation System Plan. Before a state highway project such as this may be listed in the TSP, funding sources must be identified for the project. Also, any improvement to the highway must conform to Policy 1 G of the Oregon Highway Plan, which establishes priority measures for major highway improvements.

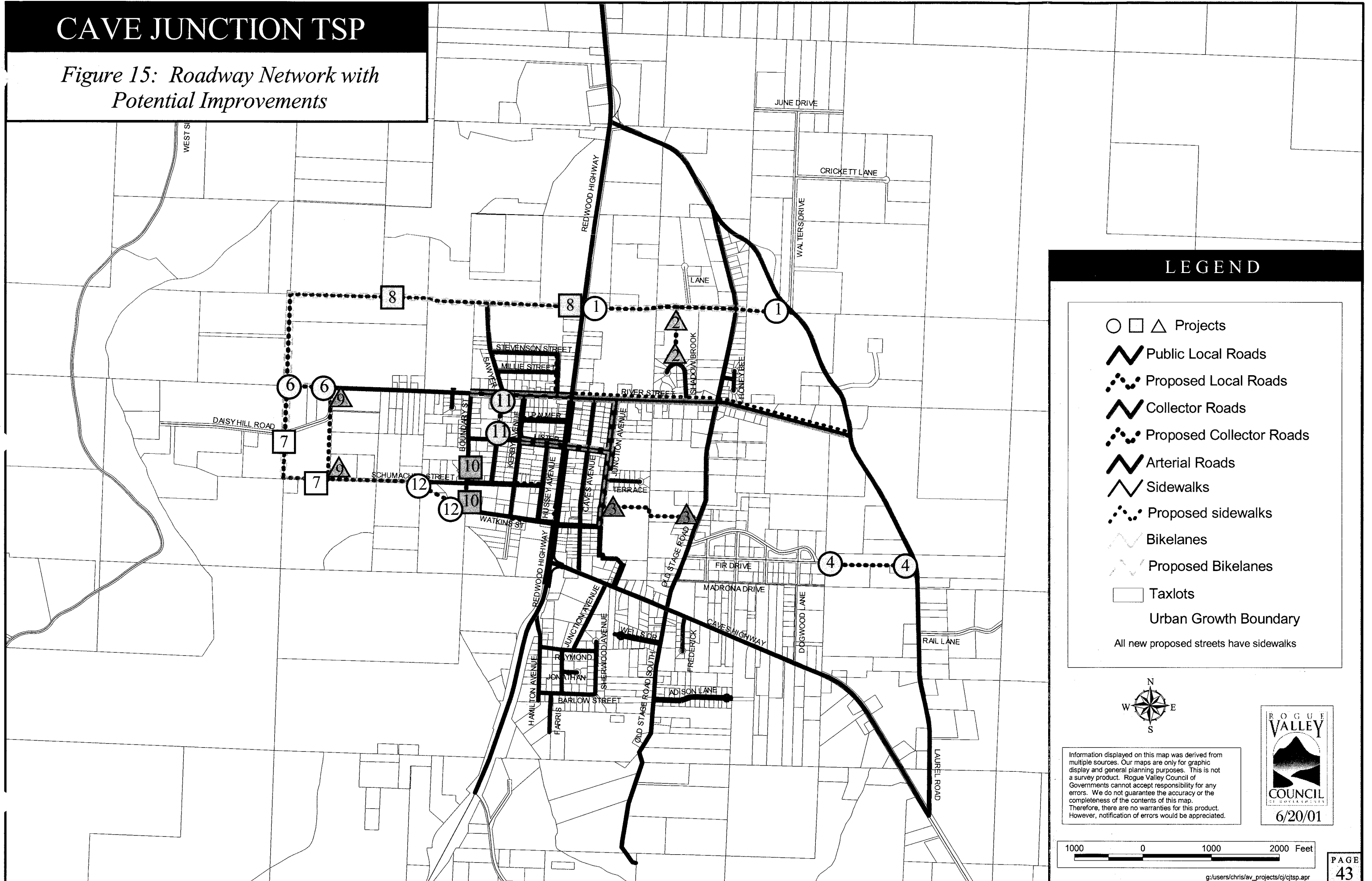
## **LAND USE AND TRANSPORTATION ALTERNATIVES**

The transportation system plan work program anticipates an evaluation of land use alternatives and transportation mitigation alternatives that might be needed to address the impacts of these alternatives. Three scenarios are mentioned: No-build, Build, and Alternative land use plan. The Alternative plan would concentrate commercial developments, propose methods of reducing local travel on the state highway, and promote bicycling and pedestrian activities. As the Cave Junction TSP project progressed, it became clear that the City already has a substantial roadway network developed that achieves these goals. The existing roadway network could accommodate future 2018 traffic with only minor improvements that are appropriate to accommodate existing traffic operations and safety concerns. The major improvements noted include providing a southbound left turn lane along Hwy 199 at Laurel Road, improving the westbound approach of Caves Highway for three lanes (separate right and left turn lanes), providing left turn lanes along Hwy 199 in the downtown area, and a new traffic signal at River Road. The need for these and other network improvements will be driven by the impact of traffic generated by specific developments that occur in the future.

The current land use plan for Cave Junction is already designed to minimize vehicle travel. Most of the commercial and employment uses are located in the downtown core and along Hwy 199. The downtown core is only a few blocks long and of a pedestrian scale. Many key land uses (i.e. City Hall, bank, and County offices) are located just a short walk from each other. The sidewalks along Hwy 199 were recently improved and are ADA compliant. Furthermore, Hwy 199 has two pedestrian crossings. Just east and west of Hwy 199, there is a fairly complete street network in place to support these uses. Consequently, many local vehicle trips occur on local roads and do not need to rely on Hwy 199. Another key land use feature of Cave Junction is that most of its public facilities (e.g. schools, parks, and senior center) are located on the east side of the city along River Road and to the south. These uses are in close proximity to each other and are within 0.5 miles of the downtown core. Thus, many trips to these uses currently occur are via walking and bicycling. The City highly values its pedestrian and bicycle character. The TSP includes an inventory of these features and what improvements could be made to enhance and promote these modes.

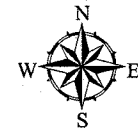
# CAVE JUNCTION TSP

Figure 15: Roadway Network with Potential Improvements

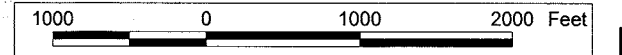


## LEGEND

- □ △ Projects
  - Public Local Roads
  - ⋯ Proposed Local Roads
  - Collector Roads
  - ⋯ Proposed Collector Roads
  - Arterial Roads
  - Sidewalks
  - ⋯ Proposed sidewalks
  - Bikelanes
  - ⋯ Proposed Bikelanes
  - Taxlots
  - Urban Growth Boundary
- All new proposed streets have sidewalks



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# TRANSPORTATION PLAN

## STREET NETWORK

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A complete roadway inventory was conducted as part of the plan update (See Appendix A). Elements included in the inventory are: jurisdiction; pavement type; pavement condition; number of lanes; shoulder type; speed; sidewalk location; bike lanes; curbs; on-street parking; roadway width; and right-of-way width. Traffic signals are located along the Redwood Highway at the intersections of Watkins Street, Lister Street, and the Caves Highway. The pavement conditions information presented in this report was collected by a windshield survey. No actual pavement analysis, such as core samples, was conducted.

### **Roadway Classifications**

Roadway classifications provide a means of establishing uniform criteria for the construction, maintenance, and use of streets within a community. Four street classifications have been developed for the City through this planning process. Figure 18 shows the functional classification of existing streets. Also shown are the alignments for proposed streets, which will improve connectivity and circulation as the community grows.

**Primary Arterial Streets** serve through traffic movement between areas and across regions. They generally are wider than lower classification streets, have limited on-street parking, and provide for greater traffic capacities at higher speeds. For arterial streets to function properly, direct access from adjacent property may need to be restricted or limited. By restricting or reducing access from adjacent properties, arterial streets are able to move traffic more efficiently.

**Secondary Arterial Streets** provide through traffic movement between smaller areas, and typically involve shorter trips than primary arterials. They generally are wider than lower classification streets, have limited on-street parking, and provide for greater traffic capacities at higher speeds. Access to abutting property and parking may be restricted or limited.

**Collector Streets** are designed to gather and disperse traffic between local neighborhoods, businesses, industries, and arterial streets. These streets provide a higher degree of access to adjacent property and are generally designed to move traffic at lower volumes and speeds than arterial streets. Collector streets are usually wider than local streets and may serve as a principal entrance for residential developments.

**Local Streets** provide direct access to adjacent properties. Local streets are designed to provide for the highest quality access possible to adjacent properties while discouraging through traffic movements. They are generally designed to carry lower volumes of traffic at lower speeds than collector and arterial streets.

The Cave Junction City Council adopted revised street design standards in November 1998. The street cross-sections are included in Appendix E.

### **Circulation**

Primary access to areas outside Cave Junction is provided by Highway 199, which connects the City with Grants Pass to the north and Crescent City, California, to the south. Highway 199 functions as a primary arterial (classified as a major arterial by ODOT), and is an important shipping route for southwestern Oregon. The Caves Highway functions as a secondary arterial (classified as a minor arterial by ODOT). It starts at Highway 199 in Cave Junction and extends east to the Oregon Caves National Monument, making it a very important tourist route.

Laurel Road, Old Stage Road, River Street, Lister Street, and Watkins Street are important collector routes for circulation and access.

Laurel Road and Old Stage Road provide north-south access on the east side of Cave Junction. River, Lister, and Watkins provide the primary east-west access through town. The extension of Watkins Street west will provide an important connection for new development on the west side of town. Of these seven facilities, the City has responsibility for the maintenance of River, Lister, and Watkins. Therefore, inter-jurisdictional coordination is very important to ensure the remaining facilities are adequately maintained to provide for the City's transportation needs.

### **Urban Business Area**

The Oregon Highway Plan includes a policy permitting alternative designations for state highways in urban areas. An Urban Business Area (UBA) is a highway segment designation that may apply to existing areas of commercial activity or future nodes or various types of centers of commercial activity within an urban growth boundary located on a Statewide, Regional or District Highway within an urban growth boundary where speeds do not exceed 35 miles per hour. The designation is limited to those special circumstances where, from a system-wide perspective, the need for local access equals or exceeds the need for mobility for an existing designation, and for a new designation, the need for local access must be greater than the need for mobility.

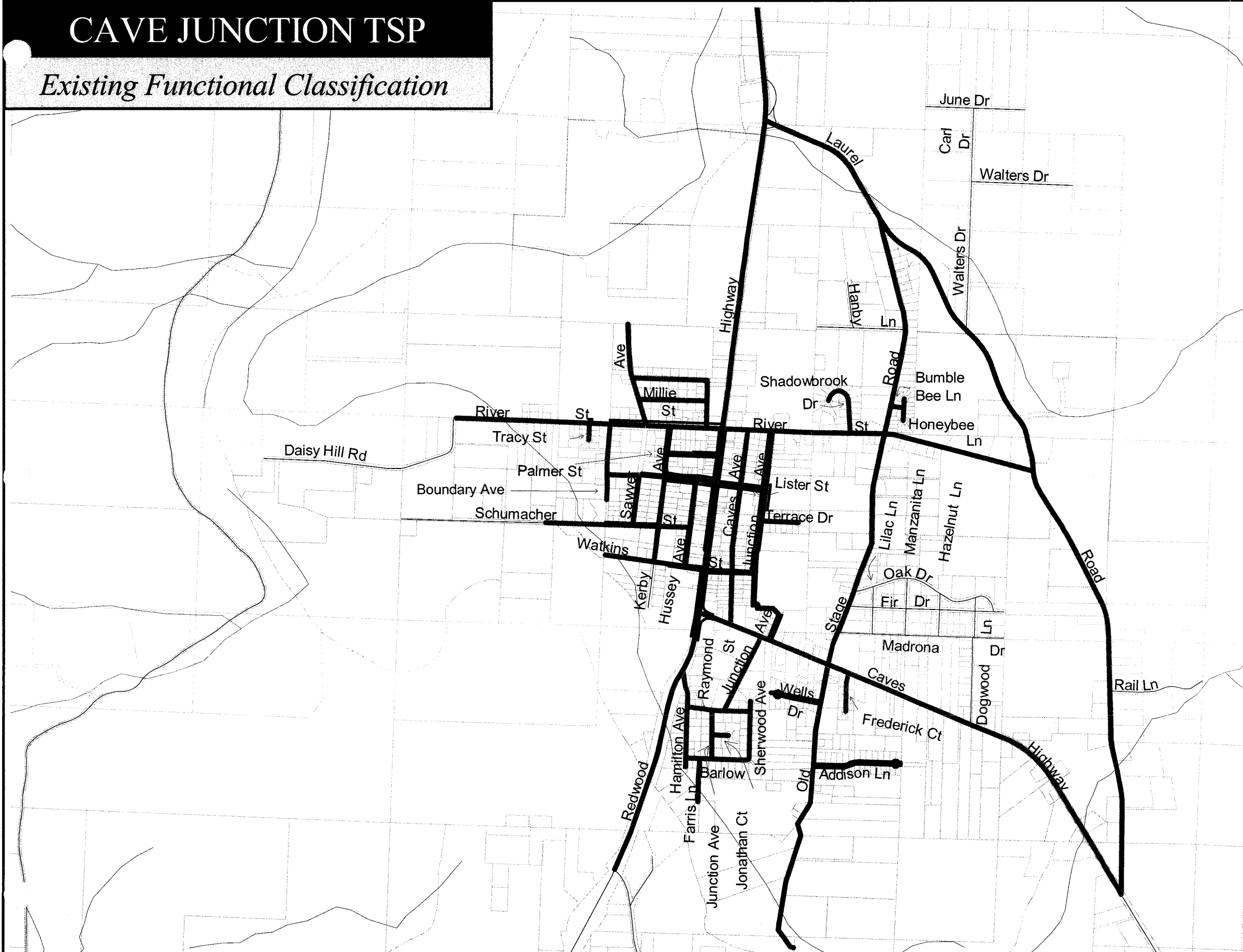
Urban Business Areas include the need for an interconnected local street and private drive network to facilitate local automobile and pedestrian circulation. New buildings should be clustered in centers or nodes so that the facilities encourage people who arrive by car to transit find it convenient to walk from place to place within the area.

State agency officials have indicated that a UBA is appropriate for Cave Junction. The recommended area extends from River Street to the Kerby Canal.



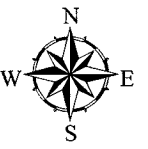
# CAVE JUNCTION TSP

## Existing Functional Classification

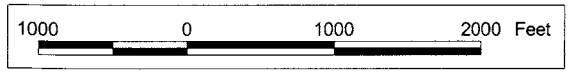


### LEGEND

-  Sidewalks
-  Arterial Streets
-  Collector Streets
-  Public Local Streets
-  Streams
-  Taxlots
-  UGB

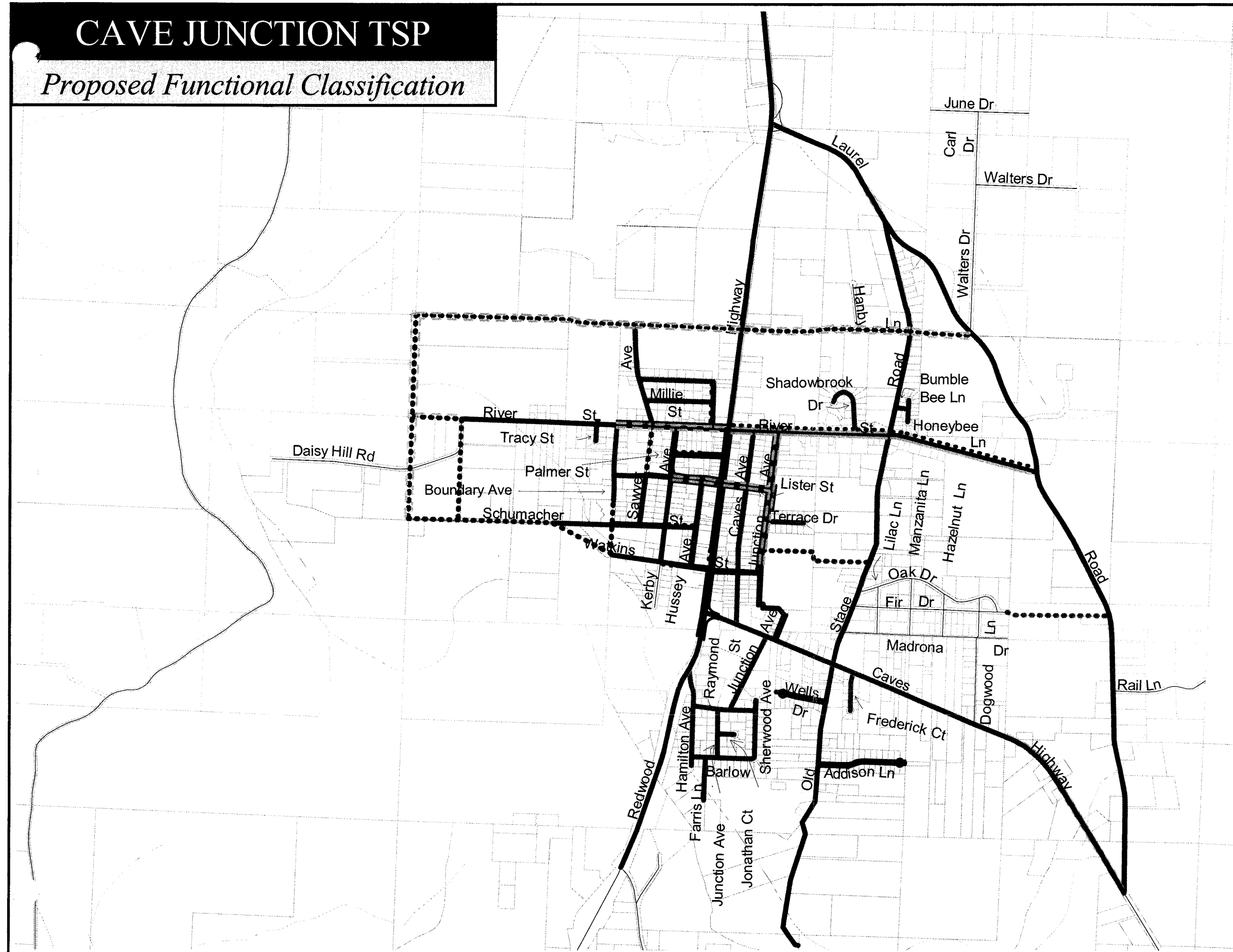


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# CAVE JUNCTION TSP

## Proposed Functional Classification



### LEGEND

- Public Local Streets
- Proposed Local Streets
- Collector Streets
- Proposed Collector Streets
- Arterial Streets
- Sidewalks
- Proposed Sidewalks
- Bikelanes
- Proposed Bikelanes
- Streams
- Taxlots
- Urban Growth Boundary

All new proposed streets have sidewalks

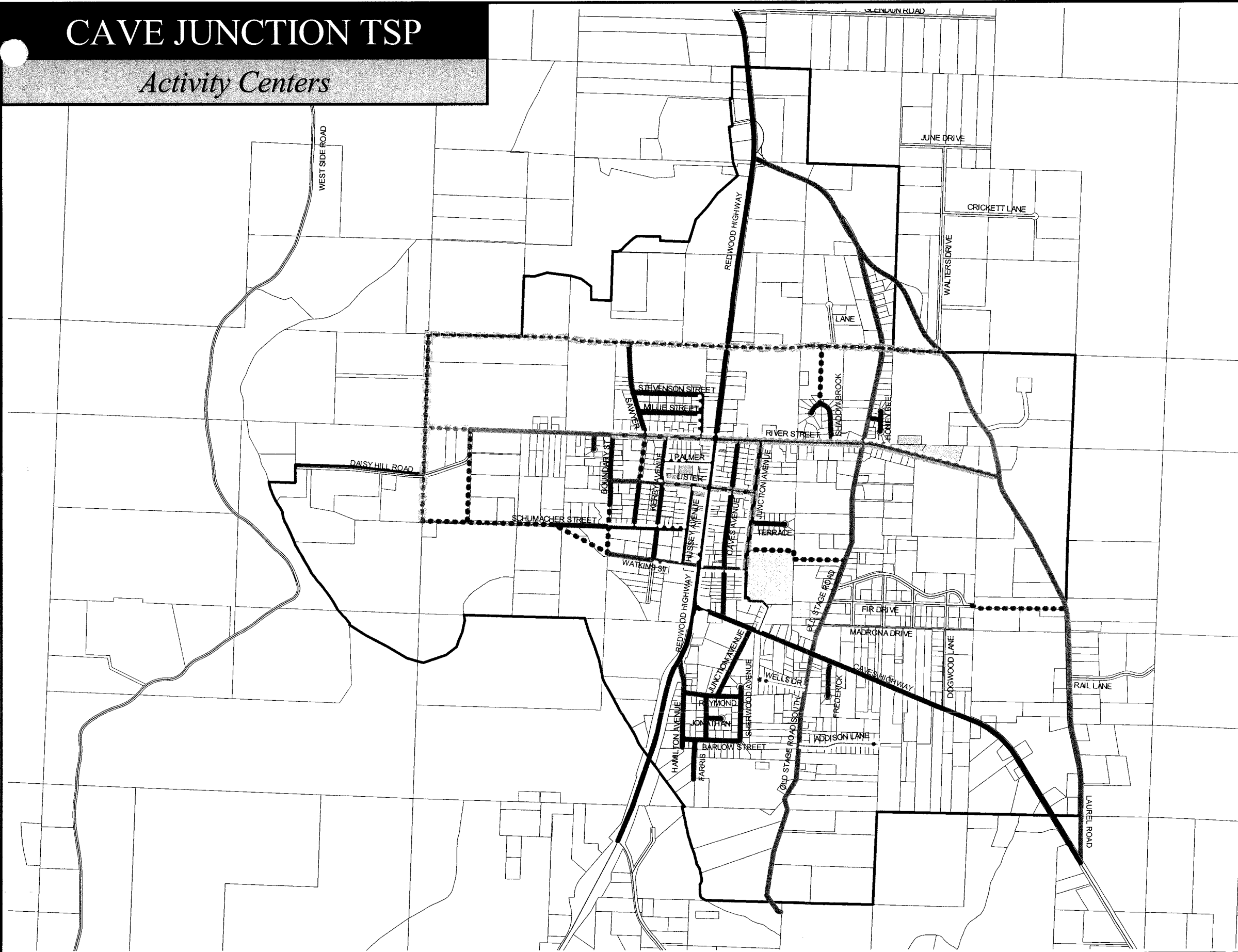


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# CAVE JUNCTION TSP

## Activity Centers



### LEGEND

- Schools
  - Parks
  - Public Places
  - Public Local Streets
  - Proposed Local Streets
  - Collector Streets
  - Proposed Collector Streets
  - Arterial Streets
  - Sidewalks
  - Proposed Sidewalks
  - Bikelanes
  - Proposed Bikelanes
  - Taxlots
  - Urban Growth Boundary
- All new proposed streets have sidewalks



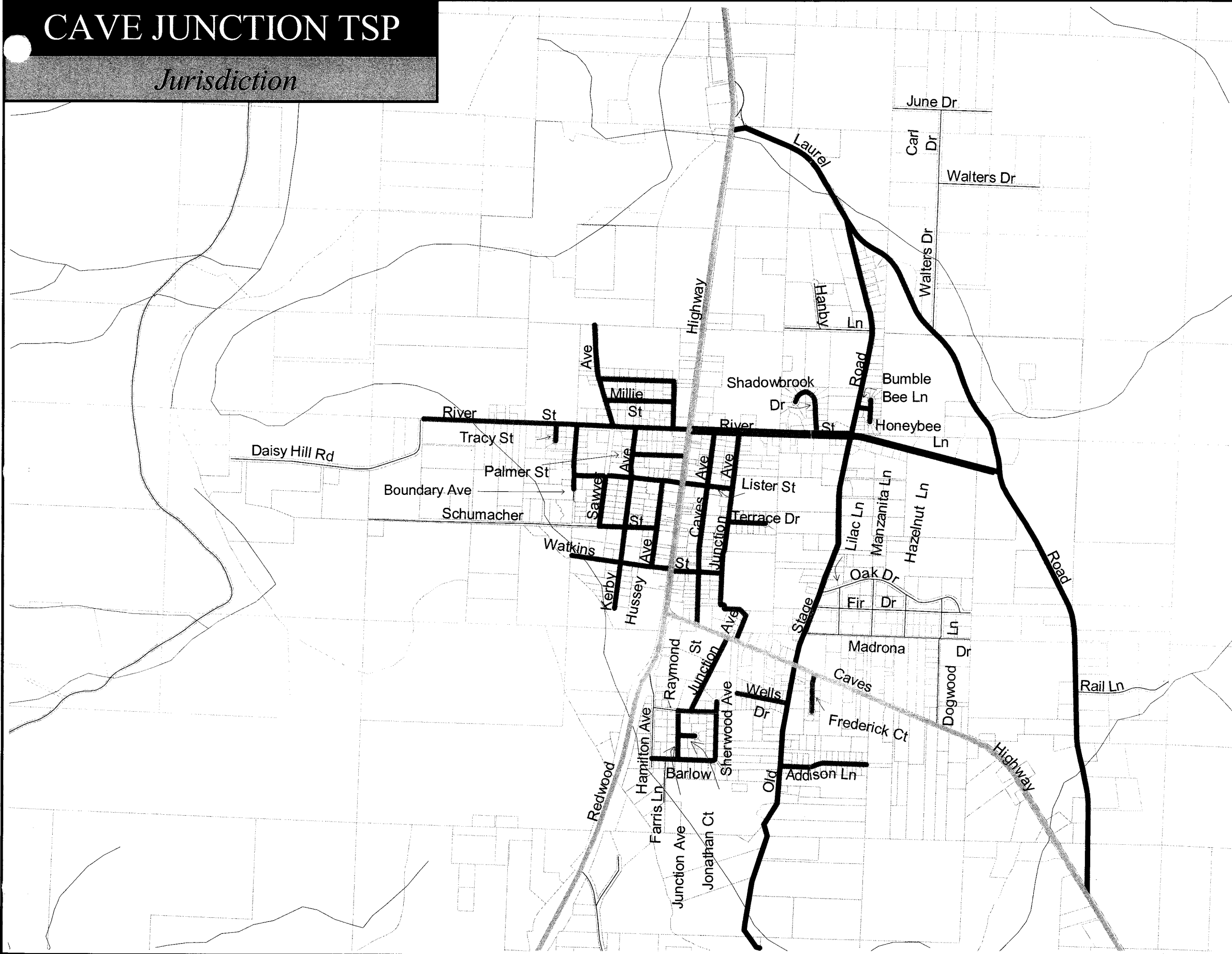
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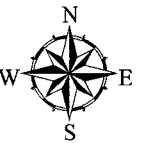
# CAVE JUNCTION TSP

## Jurisdiction

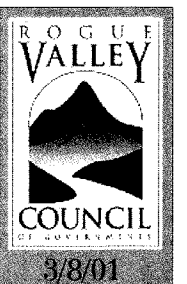


### LEGEND

- Bike Lanes
- State Streets
- County Streets
- City Streets
- Local Access Streets
- Streams
- Taxlots
- UGB



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## Traffic Volumes

Traffic volumes are available for state facilities on an average annual basis (See Figure 18). Traffic volumes have increased at fairly predictable and constant rates for Redwood Highway, but have

**FIGURE 18** Traffic Volumes on State Routes

Road	Location	Count Year					Growth 95-99	% Growth 95-99
		1995	1996	1997	1998	1999		
Hwy 199	North City Limits	7,700	9,400	8,700	8,700	8,800	1,100	14%
	.01 Mile south of Lister Street	10,400	10,500	10,200	10,200	10,300	-100	-1%
	.01 Mile north of Caves Highway	12,600	12,700	12,000	12,000	12,200	-400	-3%
	South City Limits	7,600	7,400	8,200	8,200	8,400	800	10.5%
OR Caves Hwy	.03 Mile east of Redwood Hwy.	5,300	5,100	6,200	6,200	6,300	1000	19%
	.02 Mile East of Caves Avenue	5,200	5,000	6,200	6,200	6,300	900	17%
	.06 Mile west of Old Stage Road	4,700	4,500	4,300	4,300	4,400	(300)	-7%
	.01 Mile east of Old Stage Rd.	4,000	3,800	3,900	3,900	4,000	0	0%
	East City Limits	3,900	3,700	3,800	3,800	3,900	0	0%

Source: Oregon Traffic Volumes Tables, 1995-1999

declined on Caves Highway. Recent traffic counts are not available for County roads within the study area. Counts for City streets are typically only conducted for project specific issues and areas with safety concerns. Counts were taken on Junction Avenue between Lister Street and Terrace Drive in April of 1995. This location is adjacent to the Lorna Byrne Middle School. Traffic on this road, which is one of the more heavily traveled City routes, ranged between 700 and 800 trips per day.

A sketch level capacity analysis was conducted along the state highways. Based on field observations and information from the City, it was determined that the state highways are the only routes with potential congestion issues. Congestion is not an issue for the local street system, so an in depth capacity analysis was not warranted.

Volume to Capacity (V/C) ratios were developed for the count locations along Highway 199 and Caves Highway presented in Figure 19. Generalized lane capacities were derived for both signalized and unsignalized intersections according to the 1985 Highway Capacity Manual. It should be noted that this analysis does not account for periodic heavy traffic flows experienced at certain periods throughout the year; these are average daily counts.

**FIGURE 19:** State Highways - 1999 Volume to Capacity Ratios

Road	Location	# of Lanes	Signalized	Volume	Estimated Capacity	V/C Ratio
Hwy 199	North City Limits	2	No	8,800	11,000	80%
	.01 Mile south of Lister Street	4	Yes	10,300	24,000	43%
	.01 Mile north of Caves Highway	4	Yes	12,200	24,000	51%
	South City Limits	2	No	8,400	11,000	76%
OR Caves Highway	.03 Mile east of Redwood Hwy.	2	Yes	6,300	10,000	63%
	.02 Mile East of Caves Avenue	2	No	6,300	11,000	57%
	.06 Mile west of Old Stage Road	2	No	4,400	11,000	40%
	.01 Mile east of Old Stage Rd.	2	No	4,000	11,000	36%
	East City Limits	2	No	3,900	11,000	35%

A volume to capacity ratio of 75% or higher indicates the existence of capacity deficiencies. Locations along Highway 199 at the north and south City limits have reached this threshold. System management projects, such as the left turn lane at Laurel Road should be thoroughly evaluated to help ensure the transportation system continues to function in a safe and efficient manner.

## **ACCESS MANAGEMENT**

Access management is a systematic approach to the number, spacing, type, and location of accesses, intersection design, traffic signage, and signalization. These factors significantly affect the capacity, speed, safety and operational efficiency of roadways. Access management provides a means to control these factors to achieve reasonable levels of service in a cost effective manner.

Today ODOT, counties, and many individual communities continue to explore access management as a means to mitigate the negative impacts of growth. By reporting land use changes within the City of Cave Junction that have the potential for impacting state or county facilities, the City's major thoroughfares, particularly Highway 199 and Caves Highway, will function in a safe and efficient manner. These changes can be a part of the normal development review process.

Access management is a proven concept. It is used actively by the transportation departments in many states. In Colorado, for instance, its application to a four-lane highway produced an increase in capacity to the levels normally carried on a six-lane highway. Preliminary corridor studies of Highway 30 from Portland to Astoria indicated that access management techniques could significantly modify a proposed 20-year highway widening program, with a projected savings of more than \$70-million in construction costs. Additional studies indicate that access management may permit urban traffic to flow with more than a 50% increase in speed. This translates to reductions in travel time, substantial fuel savings and lower auto emissions.

Oregon continues to refine the control and regulation of accessibility to State roadways through a formal Access Management Program. The goals are to separate traffic conflicts and reduce the rates of potential accidents while promoting increased traffic flow. As early as 1947, the Oregon legislature specified that the State could purchase or condemn private property to permit development of public rights-of-way. Subsequent legislation provided that access rights would not be automatically granted to abutting land owners after May 12, 1951 (ORS 374.405). This legislation required every property owner desiring access to obtain a permit (ORS 374.305), unless the State already owned the land adjacent to the right-of-way, in which case, the land owner might be denied the privilege of access (ORS 374.310[1]). This led to legal cases focused on the issue of a public "taking" of private property. The Court found that there were no "takings" when ODOT could provide affected property owners with alternative means of access which was outside of State control. If this could not be accomplished, the State would be required to compensate the property owner.

All collectors and arterials (functionally classified by the Oregon State Division of Highways) which connect the City with other municipalities are under the administrative control of either the County or the State. Oregon Administrative Rule (OAR) 734-051 establishes standards for highway approaches, access control, spacing standards, and medians on state highways. Criteria are established for approving highway approach applications, with an overarching goal of ensuring that public safety is maintained.

Traffic Impact Studies (TIS) are required for:

- a) Any proposed development that is expected to generate vehicle trips that equal or exceed 600 (450) daily trips or 100 hourly trips;
- b) Any proposed zoning change or comprehensive plan change; or
- c) Any proposed development or land use action where the on-site review indicates that operational or safety concerns require a TIS.

Spacing standards for approaches are based on the classification of the highways and highway segment designations of the highways, type of area and posted speed.. Highway 199 is a

Statewide Highway, while Caves Highway is a District Highway. The 1999 Oregon Highway Plan includes tables outlining the spacing standards (Appendix C). While not retroactively applied to legal approaches in effect prior to adoption of the regulations, they could be applied in the future upon redevelopment, change of use, or highway projects which affect these approaches. Although full compliance may not be achieved, the goal is to at least improve compliance with access management spacing standards.

Proper implementation of access management techniques should reduce congestion, reduce accident rates, decrease the need for highway widening, conserve energy, and reduce air pollution.

## **Pavement Management**

Budget constraints have forced many governmental jurisdictions to reduce or eliminate services. Roadway maintenance and improvement needs are exceeding the revenues received from the State Highway Trust Fund (gas taxes and related fees). Jurisdictions have responded to the funding crunch by postponing preventive roadway maintenance and improvement projects. Preventive maintenance consists of seals and thin overlays regularly applied to pavements before they are severely deteriorated. The delay of preventive maintenance causes roadway systems to deteriorate at an accelerated rate. Many public works departments do not have sufficient resources to keep their roads at even the current poor level of repair. Limited resources have been concentrated on the most pressing needs such as potholes or reconstructing failed streets.

Deferring maintenance may save money in the short-term, but long-term costs for rehabilitation and reconstruction will escalate. Street rehabilitation costs are directly linked to performing street maintenance on time. Normal maintenance prevents roadways from deteriorating beyond the point where a simple overlay will solve the problem.

Numerous studies indicate that if streets are properly maintained in a perpetual "fair" to "excellent" condition, the total annual maintenance investment is four to five times less than if the pavement is allowed to cycle through to the "poor" and "failed" conditions and then rehabilitated. If the pavement is maintained in a "fair" to "excellent" condition, only the top portion of the pavement is being maintained or replaced. In poor or failed condition the entire base, and sometimes the sub-base, must be repaired and/or rehabilitated.

The number of years that pavement stays in the "good condition plateau" depends on how well it is maintained. Ideally, this plateau could be extended indefinitely with proper timing of major rehabilitation and good interim maintenance. The optimum time for major pavement maintenance investment is just as the pavement's rate of deterioration begins increasing, or as it slips from a "good" to a "fair" condition.

Seldom is there multi year project planning, nor are there any attempts to systematically rate pavement conditions. In the past, the selection of projects for rehabilitation or reconstruction may have been based on some of the following criteria.

Whoever complains the loudest  
Political priority



General impressions  
Routine maintenance scheduling  
Repairing the worst first

The alternative is to look at streets as a system. A pavement management system is a systematic approach for maintenance and repair. It provides a method for maintaining roadways by systematically analyzing pavement life cycles, determining when to do maintenance, determining the best and most cost-effective strategy, and then budgeting accordingly to prevent major road deterioration.

A pavement management system will allow Cave Junction to make "smart" investments. The idea of a pavement management system will be incorporated into the policies and implementation strategies section of the transportation element update. Additional information about pavement management systems and pavement rating systems is provided in Appendix B.

## **BICYCLE AND PEDESTRIAN PLAN**

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The integration of pedestrians and bicyclists with vehicular traffic is an important objective of the Transportation Planning Rule. Citizens of Cave Junction also supported this objective, yet it is difficult for a community the size of Cave Junction to fund these types of projects. The City's state gas tax allowances are typically saved for three years to fund a single improvement.

Impediments for bicyclists and pedestrians are very different from those for motorists. Bicycle and pedestrian plans have typically focused on system improvements, with little or no attention given to identifying travel barriers. There are two types of physical barriers: geographical (e.g., rivers, steep terrain) and man-made (e.g., railroad tracks). In Cave Junction, the terrain is relatively flat. Existing travel barriers for bicyclists and pedestrians occur primarily at street intersections and Highway 199 crossings.

An important element of a successful bicycle and pedestrian program is public education. Community efforts are needed to teach children and adults about the benefits and responsibilities of bicycling. Education programs not only encourage new people to take up cycling, but also teach safe operation techniques for inexperienced cyclists.

Figure 17 shows the location of existing bicycle lanes and sidewalks in Cave Junction. This map also includes the recommended location of new facilities as funds become available and roads are scheduled for maintenance.

### **Bicycle Facilities**

Bicycle facilities are an important element of a successful cycling program. Inexperienced or unstable riders may feel more secure by the separation which a white line or median provides. Experienced riders need only a little extra pavement on the side of the road. Although bicycles are generally allowed anywhere a car can go, bicycle facilities may be designed and described through the following forms:

**Bicycle Route or Bikeway** Any roadway specifically designated through signs, mapping or other means as a particular path for bicycle traffic. A "Route" serves to show cyclists where good facilities exist and to alert motorists of high volumes of bicycle traffic.

**Multi-Use Path (Bicycle Path)** This is simply a non-motorized path separated from motor vehicle use by some physical barrier or open space. Paths are used for long unbroken stretches of roadway, especially when excessive volumes of traffic make cycling unfeasible for the average rider.

**Bicycle Lane** A facility for the preferential or exclusive use of bicycles adjacent to lanes of vehicular traffic. The four to six foot wide lane is separated from autos by an eight inch wide white stripe and is stenciled with diamonds, "BIKE ONLY" and a picture of a cyclist. The bike lane can cause undue hazards if it is not properly striped. Dashed lanes lines should be used for locations where autos often cross the path. Cyclists should not be routed to the right of "right turn only" auto lanes. An excellent discussion of the merits and liabilities of bike lanes may be found within the 1995 Oregon State Bicycle and Pedestrian Plan.

**Unstriped Bike Lane** This type of facility consists of the same signing and symbol designations as the bike lane, without the eight-inch lane line. For areas which have high interaction between motorists and bicyclists (many turns and crossings) this facility may be an option to serve warning while still allowing free movement of each mode.

**Shoulder Bikeway** A shoulder is used by different modes of traffic, such as pedestrians, horses as well as cyclists. The Oregon State Bicycle Plan suggests a minimum of four feet shoulders, preferably six feet. Usually the shoulder is an option for rural roads.

**Shared Road** Cyclists and motorists share one lane of travel. This may be the preferred design for very experienced cyclists, but can scare potential riders away. On low volume rural and urban roads where motorists have plenty of room to pass, the shared roadway is effective and economical.

As noted, the only official bicycle lanes in Cave Junction are on River Street, between the Redwood Highway and Laurel Road. This facility includes striped bike lanes on both sides of the street between Redwood Highway and Old Stage Road. Between Old Stage Road and Laurel Road, the bike lane converges on the south side of River Street as a separated facility in front of the Illinois Valley High School. The American Association of State Highway and Transportation Officials (AASHTO) *Guide for the Development of Bicycle Facilities* (August, 1991) provides information for the design of bicycle facilities.

The Redwood Highway is a primary regional bicycle route. However, the facility does not currently have a striped bicycle lane in the Cave Junction area. Bicyclists must use the shoulders, which makes it hazardous to utilize this facility in town where higher traffic volumes occur. Similarly, the Caves Highway requires bicyclists to utilize the shoulders, which are not paved in certain locations. Both routes are important for commute trips into and through town, and for regional cycling events, such as Cycle Oregon. The on-street parking along Highway 199 is considered an important asset to local businesses. The existing right-of-way and location of

sidewalks along the Highway do not allow for the road to be widened to accommodate bicycle lanes. This plan recommends for the road to be restriped, narrowing the interior lanes to either 11 or 12', based on a determination by the appropriate ODOT representatives. By narrowing the interior travel lanes, an increased lane width on the outside lane would serve as a shared motorist/bicycle facility, with appropriate signage to indicate this use.

As established in the 1995 Oregon Bicycle and Pedestrian Plan, bicyclists may safely mix with automobile traffic on local streets with a 25 mph speed limit or traffic volumes below 3,000 ADT (Average Daily Traffic). All local streets in Cave Junction have a 25 mph speed limit, and all are assumed to meet the ADT requirement. This application does not replace common sense; bicycles are vehicles and are subject to all rights and responsibilities of motorists.

The transportation plan recommends the inclusion of striped bicycle lanes on Caves Highway, which will provide a primary east-west route on the southern part of town. It is also recommended to provide bicycle lanes along the entire length of Watkins Street and Lister Street in the future if funding is available during reconstruction.

An important concern for bicycle access is along River Street, which is designated as a collector facility. River Street lacks both bicycle facilities and sidewalks between Daisy Hill Road and Boundary Avenue. A sidewalk exists on the north side of the road between Boundary Avenue and the Redwood Highway. As noted in the system inventory, the street width is 30', with only a 40' right-of-way. Reconstruction of this road to include sidewalks on both sides and bicycle lanes is therefore cost prohibitive. The existing sidewalk on the north section of the route in front of the school should be adequately maintained. Alternative safety and traffic calming measures should be explored to make this area more bicycle and pedestrian friendly.

## **Pedestrian Facilities**

Sidewalks provide mobility for pedestrians between home, shopping, work, and other activities. Sidewalks also give tourists and other visitors a way to get around while in town. A well maintained network of connected sidewalks is important for walkers. It is preferred to have sidewalks on both sides of a street to reduce "out of direction" travel by pedestrians. Mid-block street crossings are difficult or impossible for the elderly and disabled to negotiate.

The downtown core of Cave Junction has a fairly well integrated sidewalk system. Access across Highway 199 is a problem for people with disabilities because of the absence of adequate curb ramps. Facility deficiencies have been identified to improve connections of the existing system. Curb ramps have been installed on Highway 199 at River Street, Lister Street, and Watkins Street.

## **Facility Deficiencies**

Bicycle and pedestrian deficiencies were identified from an analysis of the existing facilities. An important issue in the identification of deficiencies is connectivity between residential neighborhoods and commercial/public areas. The following improvements were identified:

1. Redwood Hwy. North City Limits to South City Limits Bicycle Shoulders, Curb cuts at

			intersections
2.	Redwood Hwy.	North City Limits to River Street	Sidewalks
3.	Redwood Hwy.	Oregon Caves Hwy. to South City Limits	Sidewalks
4.	Oregon Caves Hwy.	Redwood Hwy. to East City Limits	Bicycle Lanes Sidewalks
5.	Laurel Road	Redwood Hwy. to East City Limits	Bicycle Lanes
6.	Old Stage Road	Laurel Road to South City Limits	Bicycle Lanes, Sidewalks
7.	Lister Street	Boundary St. to Junction Ave.	Bicycle Lanes
8.	Watkins Street	West end to Junction Ave.	Bicycle Lanes
9.	River Street	Old Stage Road to Hwy. 199	Sidewalks
10.	River Street	Boundary to Daisy Hill Road	Sidewalk on north side of road

Six of the ten street segments designated for improvement are under State or County jurisdiction. Construction of these projects will typically be the responsibility of those jurisdictions. New street construction will include bikeways on collectors and arterials, and sidewalks along all streets.

Planning Commission review of the Transportation System Plan resulted in a recommendation for two additional bikelane segments:

1. Junction Avenue from River Street to Watkins Street, providing bicycle access to Lorna Byrne Middle School.
2. Lister Street from Junction Avenue to Redwood Highway. (Already shown as project 7 above. The Planning Commission recommended continuing the bike path west from Highway 1999 only as far as Kerby Avenue because of a constricted right-of way farther west.)

## **PUBLIC TRANSPORTATION**

### **Public Transportation**

Public transportation was identified through a citizen involvement process as a needed service for Cave Junction. Two factors have hindered implementation of this service. The City's small population will not support local public transportation services. The expense of services to Grants Pass is greatly increased because of the distance between the two cities.

Currently there is no local public transportation provided within Cave Junction. Once a week, Josephine County Community Services provides Illinois Valley senior citizens transportation to different local destinations and to Grants Pass. A \$.25 fee is charged each way for local trips, with a suggested donation of \$2 for trips into Grants Pass. This service is available only to individuals 60 years or older. The Handicap Awareness Support League (HASL) operates a five-passenger wheelchair van with a volunteer driver, but has experienced a drop in ridership that is attributed, in part, to the accessibility of the Community Services van.

Josephine Community Transit, a division of the Josephine County Health and Community Action Department, operates a bus system in the Grants Pass area. A grant application for Special Transportation Funds has been submitted to pay for bus service between Cave Junction and Grants Pass. While the funding source provides primarily for the elderly and disabled, the general public would be able to use the service on a space-available basis. Trips would be scheduled to accommodate commuters to Grants Pass, and would also provide for two mid-day trips. Grant awards are anticipated in August 2001.

## **AIR, RAIL, PIPELINE, AND WATER PLAN**

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### **Air Transportation**

The main airport for commercial and freight service in southwest Oregon is the Rogue Valley International Airport in Medford, 58 miles from Cave Junction. The airport is located approximately half way between Seattle and San Francisco, just off Interstate 5, the major north south corridor for the west coast (Oregon, California, and Washington). The airport occupies 989 acres of land within the Medford city limits.

Today, the Rogue Valley International Airport provides transit for industrial and agricultural freight, business travelers, recreation seekers, and vacationers. In January of 1995, the Rogue Valley International Airport was designated a foreign trade zone and became an international point of entry.

The Illinois Valley Airport is located approximately four miles south of Cave Junction, and is designated a Class 3 airport by the State. The facility is situated on 175 acres, and provides general aviation services to Cave Junction and the Illinois Valley. The airport currently provides little in the way of services or amenities (e.g., aviation fuel, car rental). Future expansion efforts should consider the need for such services in order to make the airport a viable transportation facility for the area.

The Airport's main runway is 5,200 feet long by 75 feet wide. The Oregon Continuous Aviation System Plan (ODOT, January 1994) recommends that the airport evaluate its ability to extend the runway an additional 300 feet and provide lighting as identified in the Airport system plan. This report also recommended construction of a parallel taxiway to enhance the safety and operational flexibility of the airport.

### **Rail Services**

There are currently no rail lines in the Illinois Valley. The nearest rail facilities are located in Grants Pass and are limited to freight services.

### **Pipeline Transportation**

There are no major pipeline transportation facilities in the study area. The Northwest Pipeline Corporation and C. P. National have major distribution lines in the Grants Pass area, but these facilities do not extend to Cave Junction.

## Water Transportation

Water is not a means of transportation in Cave Junction. Water recreation exists on the Illinois River.

## TRANSPORTATION FINANCING

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According to the Oregon Roads Finance Study (ODOT, 1993), nearly one third of the state's road miles were in poor condition. More than 40 percent of the nearly \$8 billion in city transportation financing needs was found to be unfunded. The City of Cave Junction shares part of this unfunded portion. There are a number of local, state, and federal funding sources that may be used for the City's transportation system (See Appendix C). Local funding mechanisms are presented to suggest how the City of Cave Junction might develop its own specialized program to fund specific transportation facility maintenance and improvement needs. Figure 20 provides an overview of revenues and expenditures for street maintenance/repair between 1991 and 1995.

The pressure of regional growth makes the development of adequate and equitable funding mechanisms a major part of the City's overall transportation planning strategy. Following historic trends, the cost of new construction and maintenance is anticipated to increase dramatically over the next 15 to 20 years. The City will need to augment federal, state, and county funds with new financing mechanisms.

Whether Cave Junction contemplates a form of "pay as you go" funding (where infrastructure costs are paid for from current revenues with fees, taxes or user charges) or debt financing (through the issuance of long term debt obligations such as bonds), decision makers will have to weigh many factors before committing to pay for transportation maintenance and improvement costs. Their evaluation of various forms of financing will need to be tempered by a careful analysis of such criteria as:

- Legal Authority
- Financial Capacity
- Inherent Stability
- Administrative Feasibility
- Equity
- Political Acceptability

**FIGURE 20:** Historical Revenue and Expenditures for Street Maintenance/Improvements

<b>Resources for Street Maintenance</b>	<b>Actual Revenue FY96/97</b>	<b>Actual Revenue 97/98</b>	<b>Actual Revenue 98/99</b>	<b>Adopted Budget 99/00</b>
Business Licenses	\$12,218	\$12,973	\$11,539	\$13,000
Gas Tax	\$46,572	\$58,206	\$53,051	\$50,000
Miscellaneous	\$5,111	\$209	\$389	\$0

Net Working Capital	\$3,935	\$665	\$3,922	\$0
Interest	\$0	\$0	\$0	\$0
Total	\$67,836	\$72,053	\$68,901	\$63,000
<b>Expenditures</b>	<b>96-97</b>	<b>97-98</b>	<b>98-99</b>	<b>Budget 99-00</b>
Personnel	\$31,295	\$33,222	\$35,886	\$47,335
Street Maintenance- Material/Services	\$26,662	\$29,390	\$32,256	\$17,000
Transfers - Improvements	\$7,000	\$0	\$0	\$0
Special Fund - Improvements	\$68,960	\$0	\$57,691	\$70,000
Reserve Fund - Maintenance	\$17,698	\$0	\$423	\$27,376
Total	\$151,885	\$62,612	\$126,256	\$161,711

# FINDINGS, GOALS, AND POLICIES

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The purpose of adopting goals and policies is to provide a consistent framework to follow when making decisions about the transportation system. Six specific findings have been made as part of this planning process:

## ***Findings:***

1. Transportation affects all residents in Cave Junction, and is a critical element of the local economy. Mobility throughout the community and access to destinations requires an interconnected, multi-modal network. The automobile will remain the dominant form of transportation into the foreseeable future. Safety is important for an efficient transportation system.
2. All people should have equal access to transportation. Transportation options should be provided to those without access to an automobile, the elderly, the disabled, and those who choose to use alternative modes of travel. Highway 199 presents a travel barrier to bicyclists and pedestrians. Travel across the highway is especially difficult for individuals with disabilities. Facility enhancements, such as striped crosswalks and curb cuts, are needed.
3. Funding available to the City of Cave Junction for transportation improvements is limited. Maintenance of the existing transportation system is a priority over the construction of new facilities. It will be important to investigate additional funding strategies for the maintenance and improvement of the transportation system.
4. Transportation and land use issues are interconnected. The existing transportation system will be impacted as the City continues to develop. Compatibility between land use and transportation should be preserved through a coordinated decision making process that involves all affected agencies.
5. There is a need for public transportation in Cave Junction. Cost effective, affordable transit is difficult to provide in this area because of a low population density and long travel distances. The City of Cave Junction supports public transportation through coordination with appropriate agencies and jurisdictions.
6. River Street is lacking bicycle lanes and sidewalks between Boundary Avenue and Daisy Hill Road. This street is an important route because an elementary school is located across from the Tracy Street intersection. Due to inadequate right of way width, it is cost prohibitive to retrofit the roadway to include sidewalks and bicycle lanes on both sides. Alternative safety and traffic calming measures should be explored to make this area more bicycle and pedestrian friendly.



## ***General Transportation Goals, Policies and Objectives***

**GOAL: TO PROVIDE A SAFE AND EFFICIENT TRANSPORTATION SYSTEM THAT REDUCES ENERGY REQUIREMENTS, REGIONAL AIR CONTAMINANTS AND PUBLIC COSTS AND PROVIDES FOR THE NEEDS OF THOSE NOT ABLE OR WISHING TO DRIVE AUTOMOBILES.**

### Policies:

1. The City will implement its transportation goals through this Transportation System Plan (TSP) and the City will review and update the TSP during periodic review, or more frequently if necessary.
2. The construction of transportation facilities shall be timed to coincide with community needs, and shall be implemented in a way that minimizes impacts on existing development. Where possible, the timing of facility maintenance will be coordinated with other capital improvements to minimize cost and avoid extraordinary maintenance on a facility scheduled for reconstruction or replacement.
3. The implementation of transportation system and demand management measures, enhanced transit service, and provision for bicycle and pedestrian facilities shall be pursued as a first choice for accommodating travel demand and relieving congestion in a travel corridor, before street widening projects are considered.
4. Transportation facilities shall be designed and constructed to minimize noise, energy consumption, neighborhood disruption, economic losses to the private or public economy, social, environmental and institutional disruptions, and to encourage the use of public transit, bikeways and walkways.
5. Aesthetics and landscaping shall be considered in the design of the transportation system. Within the physical and financial constraints of the project, landscaping, and where appropriate, public art, shall be included in the design of the transportation facility. Various landscaping designs, suitable plants and materials shall be used by the City, private entities or individuals to enhance the livability of the area.
6. The rapid and safe movement of fire, medical and police vehicles shall be an integral part of the design and operation of the transportation system.
7. The City shall coordinate transportation planning and construction efforts with County, regional, State and Federal plans.

## ***Finance***

**GOAL: A TRANSPORTATION SYSTEM FOR THE CAVE JUNCTION URBAN AREA THAT IS ADEQUATELY FUNDED TO MEET ITS CURRENT AND FUTURE CAPITAL, MAINTENANCE AND OPERATIONS NEEDS.**

*Objective 1: Meet the current and future capital improvement needs of the transportation system for the Cave Junction urban area, as outlined in this plan, through a variety of funding sources.*

Policies:

1. The City shall consider adoption of transportation system development charges (SDCs), as defined by Oregon Revised Statutes and City ordinances, to be collected by the City to offset costs of new development on area-wide transportation facilities.
2. The City shall require those responsible for new development to mitigate their development's impacts to the transportation system, as authorized in the Cave Junction Zoning Ordinance and Oregon Revised Statutes, concurrent with the development of the property.
3. The City shall consider setting aside one percent of its allocation of State Highway Fuel Tax funds for creation of on-street bicycle and pedestrian facilities.
4. When the City agrees to vacation of a public right-of-way at the request of a property owner, conditions of such agreement shall include payment by the benefited property owner of fair market value for the land being converted to private ownership. Funds received for vacated lands shall be placed in a special reserve trust fund for the acquisition of future rights-of-way.

*Objective 2: Secure adequate funding to implement a street maintenance program that will sustain a maximum service life for pavement surface and other transportation facilities.*

Policies:

1. Assuming there are no changes in State funding mechanisms, the primary funding sources for street system maintenance activities shall be the City's allocation of the State Highway Fuel Tax.
2. The City shall continue to participate in cooperative agreements with other State and local jurisdictions for maintenance and operation activities based on equitable determinations of responsibility and benefit.

*Objective 3: Secure adequate funding for the operation of the transportation system including advance planning, design engineering, signal operations, system management, illumination, and cleaning activities.*

1. Assuming there are no changes in State funding mechanisms, transportation system operations shall be funded primarily from the City's allocation of the State Highway Fuel Tax. Other funding sources should be pursued to augment the financial requirements of providing adequate future system operations.

2. The City shall encourage the formation of local street lighting districts when a neighborhood proposes the installation or improvement of lighting facilities. Lighting District members assume or share the costs of capital improvements, maintenance and operations of their own lighting system. Entire subdivisions shall be served by a proposed lighting district whenever practicable to promote cost equity and reduce costs.
3. The City shall continue to pursue federal, state and private grants to augment operations activities, especially in the planning and engineering functions.

## ***Land Use***

### Policies:

1. The City shall consider changes to the Cave Junction Zoning Ordinance that will implement Comprehensive Plan goals that encourage mixed-use and high density development near the city center to reduce private vehicle trips by increasing access to transportation alternatives.
2. To reinforce the implementation of this transportation plan in land use decision making, corridors for future auto, bicycle and pedestrian facilities have been adopted into this plan.
3. The City shall review and revise as necessary a new Subdivision and Land Partition Ordinance that includes simplified Planned Unit Development requirements, and that includes design standards and review criteria for adequate transportation facilities. Such provisions shall include, but are not limited to, connectivity between neighborhoods for vehicles, bicycles and pedestrians, access management standards, and street width and parking requirements.
4. The City shall review and revise as necessary the Cave Junction Zoning Ordinance wherever appropriate, especially the articles regarding Off-Street Parking. Site Development Plan review and Conditional Use Permit review, to add or improve transportation-related design standards and review criteria. Such revisions shall include, but are not limited to, connectivity between neighborhoods for vehicles, bicycles and pedestrians, access management standards, street width and parking requirements.
5. The City shall coordinate land use planning with transportation planning by notifying the City Administrator, Traffic Committee, Public Works Director, City Engineer, Fire Department and Police Department of all planning proposals that include transportation components. The Oregon Department of Transportation and the Josephine County Public Works Department shall be notified of all planning proposals directly or indirectly affecting their facilities. All departments will be invited to make suggestions for design improvement and conditions of approval.

## ***Transportation System Management***

**GOAL: TO MAXIMIZE THE EFFICIENCY OF THE EXISTING SURFACE TRANSPORTATION SYSTEM THROUGH MANAGEMENT TECHNIQUES AND FACILITY IMPROVEMENTS.**

*Objective: To maximize the effective capacity of the street system through improvements in physical design and management of on-street parking.*

- 1.The City shall give the physical improvement of intersections a higher priority than general street corridor widenings in the design process, when seeking ways to increase capacity and relieve congestion on a street.
- 2.Where on-street parking is permitted on a congested arterial street, the City shall give first priority to removing on-street parking as a means of enhancing the capacity of the facility. The exception will be arterial streets within the central business district, where parking will not be removed. Depending upon the situation and proper analysis, the City may consider timed on-street parking prohibitions during peak travel periods in lieu of permanent removal.

## **Access Management**

*Objective: To increase street system safety and capacity through the adoption and implementation of access management standards.*

### Policies:

The City shall develop and adopt specific access management standards based on the following principles:

- 1.Properties with frontage along two streets shall take primary access from the street with the lower classification.
- 2.Any one development along the arterial street system shall be considered in its entirety, regardless of the number of individual parcels it contains. Individual driveways will not be considered for each parcel.
3. Signalized access for private streets and driveways onto the major street system shall not be permitted within 1,320 feet (1/4 mile) of any existing or planned future signal.
- 4.Shared, mutual access easements shall be designed and provided along arterial street frontage for future development. Shared, mutual access easements shall also be encouraged for existing development.

5. The spacing of access points shall be determined based on street classification. Generally, access spacing includes accesses along the same side of the street or on the opposite side of the street. Access points shall be located directly across from existing or future access, provided adequate spacing results.
6. All access to the public right-of-way shall be located, designed, and constructed to the standards of the affected public agency and the Site Review Committee. Likewise, variances to access management standards shall be granted at the discretion of the hearings body, based upon the report of the Site Review Committee.
7. The City shall cooperate with the State's incorporation of access management standards into all of its arterial street design projects. Access management measures may include, but are not limited to, construction of raised median, driveway consolidation, driveway relocation, and closure of local street access to the arterial.
8. Consistent with the City's goal of improving mobility, the City shall coordinate with state and county agencies in developing access management projects for congested arterials to help improve safety and traffic flow. Access management projects may include, but are not limited to, construction of raised medians, driveway consolidation, driveway relocation, and closure of local street access to the arterial.
9. The City shall maintain carrying capacity and safety of pedestrian, bicycle, public transit and motor vehicle movement on arterials and collectors through driveway and curb cut consolidation or reduction.
10. The City shall encourage feasible alternatives to direct driveway access onto streets designated as collectors and arterials.
11. The City shall encourage design that combines multiple driveway accesses to a single point in a residential and commercial development.

## ***Streets***

**GOAL: PROVIDE A COMPREHENSIVE SYSTEM OF STREETS AND HIGHWAYS THAT SERVES THE MOBILITY AND MULTIMODAL TRAVEL NEEDS OF THE CAVE JUNCTION URBAN AREA.**

*Objective 1: Develop a comprehensive, hierarchical system of streets and highways that provides for optimal mobility for all travel modes throughout the Cave Junction urban area.*

Policies:

1. The City shall fulfill its system wide travel capacity needs through the use of multiple travel modes within its public rights-of-way.
2. The City's street system shall contain a grid network of arterial streets and highways that link the central core area and major industry with regional and statewide highways.
3. The City's street system shall contain a network of collector streets that connect local traffic to the arterial street system.
4. The City shall classify streets and highways within the Cave Junction urban area based on how they will function within the overall system.
5. The City shall periodically review and revise street design standards. The City shall consider incorporating traditional neighborhood design elements including, but not limited to, planting strips, minimum necessary curb radii, alleys and "skinny streets" in standards.
6. To facilitate pedestrian crossing, discourage through traffic, and reduce speeds, local streets shall not be excessively wide. However, local streets must have sufficient width to provide emergency access.
7. Within budget constraints, the City shall integrate traffic calming techniques into city street design standards to reduce automobile speeds within new and existing neighborhoods.
8. The City shall maintain street surfaces to achieve maximum pavement life so that road conditions are good and pavement maintenance costs are minimized.
9. The City shall discourage cul-de-sac or dead-end street designs whenever an interconnection alternative exists. Development of a modified grid street pattern shall be encouraged for connecting new and existing neighborhoods during subdivisions and partitions.
10. The City shall require street dedications as a condition of land development, where approved street plans demonstrate the need for a wider right-of-way.
11. Improvements to streets, in addition to those in or abutting a development, may be required as a condition of approval of subdivisions and other intensifications of land use.

*Objective 2: Design City streets in a manner that: maximizes the utility of public right-of-way, is appropriate to their functional role, and provides for multiple travel modes, while minimizing their impact on the character and livability of surrounding neighborhoods and business districts.*

Policies:

1. The City of Cave Junction shall design its streets to safely accommodate pedestrian, bicycle and motor vehicle travel.
2. Arterial and collector street intersections shall be designed to promote safe and accessible crossings for pedestrians and bicyclists. Intersection design should incorporate measures to make pedestrian crossings convenient, minimizing barriers to pedestrian mobility.
3. Left-turn pockets shall be incorporated into the design of intersections of arterial streets with other arterial and collector streets, as well as collector streets with arterials and other collectors.
4. The City of Cave Junction Street Design Specifications in the Municipal Code reflect the American Public Works Association manual and shall be the basis for all street design within the Cave Junction urban area.
5. The City of Cave Junction shall apply the street design standard that most safely and efficiently provides motor vehicle capacity appropriate for the functional classification of the street.
6. Wherever possible the City of Cave Junction shall incorporate safely designed, aesthetic features into the streetscape of its public rights-of-way. These features may include: trees, shrubs, and grasses; planting strips and raised medians; and, in some instances, furniture, planters, special lighting, public art, or non-standard paving materials.
7. When existing streets are widened or reconstructed they shall be designed to the adopted street design standards for the appropriate street classification. Adjustments to the design standards may be necessary to avoid existing topographical constraints, historic properties, schools, cemeteries, existing on-street parking and significant cultural features. The design of the street shall be sensitive to the livability of the surrounding neighborhood.
8. Affected neighborhoods shall be invited to review proposed designs before construction begins.
9. To maintain the utility of the public right-of-way for the mobility of all users, access location and spacing to arterial and collector streets shall be controlled.

*Objective 3: The City will continue to promote traffic safety by enforcing clear vision area regulations applicable to public and private property located at intersections. The existing clear vision area ordinance shall be reviewed and revised as needed to ensure that fences, hedges, foliage and other landscaping features do not obstruct the line of sight of drivers and cyclists entering intersections.*

Policies:

- 1.The City shall work with other federal, state and local government agencies to promote traffic safety education and awareness, emphasizing the responsibilities and courtesies required of drivers and cyclists.
- 2.Through its law enforcement resources, the City shall continue to work to increase traffic safety by actively enforcing the City and State motor vehicle codes.
- 3.The City shall place a higher priority on funding and constructing street projects that address identified vehicular, bicycle, and pedestrian safety problems than those projects that solely respond to automotive capacity deficiencies in the street system.
- 4.The City shall work to increase traffic safety by requiring private property owners to maintain vision areas adjacent to intersections and driveways clear of fences, landscaping, and foliage that obstruct the necessary views of motorists, bicyclists, and pedestrians.
- 5.The City shall coordinate with the County to develop a process for identifying and addressing areas prone to traffic accidents.

*Objective 4: Efficiently plan, design, and construct City-funded street improvement projects to meet the safety and travel demands of the community.*

Policies:

- 1.The City shall select street improvement projects from those listed in the Cave Junction Transportation System Plan when making significant increases in system capacity or bringing arterial or collector streets up to urban standards. The selection of improvement projects should be prioritized based on consideration of improvements to safety, relief of existing congestion, response to near-term growth, system-wide benefits, geographic equity, and availability of funding.
- 2.To maximize the longevity of its capital investments, the City shall design street improvement projects to meet existing travel demand and, whenever possible to accommodate anticipated travel demand for the next 20 years for that facility.
- 3.New arterial and collector street alignments shall be surveyed and delineated after their adoption in the Cave Junction Transportation System Plan. The determination of alignments will allow for the preservation of land for public rights-of-way and give advance notice to property owners and citizens of where future expansions of the street system will occur.
- 4.The City shall involve representatives of affected neighborhood associations and citizens in an advisory role in the design of street improvement projects.



*Objective 5: A street system that is improved to accommodate travel demand created by growth and development in the community.*

Policies:

1. The City shall require Traffic Impact Analyses as part of land use development proposals to assess the impact that a development will have on the existing and planned transportation system. Thresholds for having to fulfill this requirement and specific analysis criteria shall be established in the Cave Junction Zoning Ordinance.
2. The City shall require new development to make reasonable site-related improvements to connecting streets where capacity is inadequate to serve the development.
3. The City may require new development to pay charges toward the mitigation of system-wide transportation impacts created by new growth in the community through Street System Development Charges (SDCs) and any other street fees that are established by the City. These funds can be used toward improvements to the street system. Projects funded through these charges are growth-related and should be selected from the approved list and prioritized based upon the established criteria.
4. The City shall cooperate with ODOT in designating the area from River Street to the Kerby Canal as an Urban Business Area.

***Bicycle***

**GOAL: TO FACILITATE AND ENCOURAGE THE INCREASED USE OF BICYCLE TRANSPORTATION IN CAVE JUNCTION BY ASSURING THAT CONVENIENT, ACCESSIBLE AND SAFE CYCLING FACILITIES ARE PROVIDED.**

*Objective 1: The City of Cave Junction will create a comprehensive system of bicycle facilities.*

Policies:

1. The City of Cave Junction recognizes bicycle transportation as a viable component of the transportation system
2. The Bicycle Element of this plan serves as the Cave Junction Bicycle Master Plan.
3. The City of Cave Junction shall actively pursue development of a linked bicycle network, focusing on the arterial and collector street system, and concentrating on the provision of bicycle lanes to be completed within the planning period (20 years). The bikeway network will

serve bicyclists' needs for travel to employment centers, commercial districts, transit centers, institutions and recreational destinations.

4. The City of Cave Junction shall encourage using all opportunities to add bike lanes in conjunction with road reconstruction and restriping projects on collector and arterial streets.
5. The City of Cave Junction shall assure that the design of streets and public improvement projects facilitates bicycling by providing proper paving, lane width, traffic control, storm drainage grates, striping, signage, lighting, etc.
6. The City of Cave Junction shall assure regular maintenance of existing bicycle facilities, and take actions to improve crossings at creeks and major streets.
7. The City of Cave Junction shall assure the provision of bicycle racks and/or shelters at critical locations within the downtown and other locations where publicly provided bicycle parking facilities are called for.
8. The City of Cave Junction shall actively work with ODOT to improve bicycling on State Highway 199 and Caves Highway within Cave Junction.
9. The City of Cave Junction shall give priority to bicycle traffic over parking within public rights-of-way designated on the Bicycle Master Plan or otherwise determined to be important bicycling routes.
10. The City of Cave Junction shall encourage bicycle recreation.
11. The City shall require sidewalks and pedestrian access in all new developments.
12. The City shall require secure bicycle parking in business developments, institutions, and multi-family developments.

*Objective 2: The City will promote bicycle safety and awareness.*

1. The City of Cave Junction shall encourage local and state bicycle education and safety programs intended to improve bicycling skills, observance of laws, and overall safety for both children and adults.
2. The City shall consider the use of the media, bicycle committees, bicycle plans and other methods to promote use of bicycling for transportation purposes.

## ***Pedestrian***

**GOAL: TO PROVIDE A COMPREHENSIVE SYSTEM OF CONNECTING SIDEWALKS AND WALKWAYS THAT WILL ENCOURAGE AND INCREASE SAFE PEDESTRIAN TRAVEL.**

*Objective 1: The City of Cave Junction shall create a comprehensive system of pedestrian facilities.*

### Policies:

- 1.The City shall continue to inventory and map existing pedestrian facilities.
- 2.The City shall establish a Sidewalk Construction Program to complete the pedestrian facility network. The program will include criteria for prioritizing sidewalk projects.
- 3.Sidewalks and walkways shall complement access to multi-use paths. Activity centers and business districts should focus attention on and encourage pedestrian travel within their proximity.
- 4.All future development shall include sidewalk and pedestrian access construction as required by the Cave Junction Zoning Ordinance and adopted Street Specification Standards. All road construction or renovation projects shall include sidewalks.
- 5.The City shall encourage ODOT to provide crosswalks at all signalized intersections. Crosswalks at controlled intersections should be provided near schools, commercial areas, and other high volume pedestrian locations.
- 6.The location and design of sidewalks shall comply with the requirements of the Americans with Disabilities Act.

*Objective 2: Mixed-use development that encourages pedestrian travel by including housing close to commercial and institutional activities will be encouraged. As the Municipal Code is updated, existing provisions for mixed-use development shall be reviewed to consider changes that will increase opportunities and incentives for mixed-use development.*

### Policies:

- 1.The City shall establish standards for the maintenance and safety of pedestrian facilities. These standards shall include the removal of hazards and obstacles to pedestrian travel.

2. Zoning shall be reviewed and revised as appropriate to allow for mixed land uses that promote pedestrian travel.
3. The City shall encourage efforts that inform and promote the health, economic, and environmental benefits of walking for the individual and community. Walking for travel and recreation shall be encouraged to achieve a more healthful environment that reduces pollution and noise, that will foster a more livable community.
4. The City shall encourage the development of a connecting, multi-use trail network, using existing corridors where possible.

*Objective 3: The City of Cave Junction shall encourage education services and promote safe pedestrian travel to reduce the number of accidents involving pedestrians.*

Policies:

1. The City shall encourage schools, safety organizations, and law enforcement agencies to provide information and instruction on pedestrian safety issues that focus on prevention of the most frequent accident causes. The programs shall educate all roadway users of their privileges and responsibilities when driving, bicycling and walking.
2. Pedestrian traffic should be separated from auto traffic on streets and in parking lots wherever possible.

**Transit**

**GOAL: A TRANSIT SYSTEM THAT PROVIDES CONVENIENT AND ACCESSIBLE TRANSIT SERVICES TO THE CITIZENS OF THE CAVE JUNCTION URBAN AREA.**

*Objective 1: Ensure that transit services be accessible to Cave Junction urban area residences and businesses.*

Policies:

1. To encourage accessibility and increased ridership, the City shall continue to encourage future transit-supportive land uses, such as mixed uses, multiple-family, and employment centers to be located on or near transit corridors.
2. Through its zoning and development regulations, the City shall continue to facilitate accessibility to transit services through transit-supportive streetscape, subdivision, and site design requirements that promote pedestrian connectivity, convenience and safety.
3. The City shall include the consideration of transit operations in the design and operation of street infrastructure wherever it is appropriate.

4. The City of Cave Junction shall encourage connectivity between different travel modes. Park-and-ride facilities should be accessible by pedestrian, bicycle, bus and automobile travel modes.
5. The City shall identify park and ride, bike and ride, and walk and ride lots in Cave Junction to support ridesharing.

# **APPENDIX A - ROADWAY INVENTORY**

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## CAVE JUNCTION ROADWAY INVENTORY

## CAVE JUNCTION

Street Name	Segment Name (From)	Segment Name (To)	Jurisdiction	Road Class.	Pavement Type	Number of Lanes	Shoulder Type	Speed	Sidewalks Left/Right	Bike lane	Curbs	On Str Parking
LAUREL ROAD	RAIL LANE	OREGON CAVE HWY	Josephine Co.	Collector	ASPHALT	2	GRAVEL	55	NO	NO	NO	NO
SAWYER AVE NORTH	RIVER STREET	END	Cave Junction	Local	ASPHALT	2	DITCH	25	NO	NO	NO	NO
SHERWOOD AVE	RAYMOND	BARLOW	Cave Junction	Local	ASPHALT	2	DITCH	25	NO	NO	NO	NO
BOUNDARY AVE	LISTER STREET	RIVER STREET	Cave Junction	Local	ASPHALT	2	GRAVEL	25	NO	NO	NO	NO
JUNCTION AVE NORTH	LISTER STREET	RIVER STREET	Cave Junction	Local	ASPHALT	2	DITCH	25	LEFT	NO	RIGHT	NO
JUNCTION AVE SOUTH	TERRACE STREET	LISTER STREET	Cave Junction	Local	ASPHALT	2	DITCH	25	LEFT	NO	RIGHT	NO
WALTERS DRIVE N.	LAUREL ROAD	WALTERS DRIVE E.	Private	Local	ASPHALT	2	DITCH	25	NO	NO	NO	NO
WALTERS DRIVE N.	CHANGES TO JUNE DRIVE		Private	Local	ASPHALT	2	DITCH	25	NO	NO	NO	NO
JUNCTION AVE SOUTH	WATKINS STREET	TERRACE STREET	Cave Junction	Local	ASPHALT	2	DITCH	25	LEFT	NO	RIGHT	NO
REDWOOD HWY	OREGON CAVES HWY	SOUTH UGB	ODOT	Arterial	ASPHALT	2	GRAVEL	30	NO	NO	NO	NO
LAUREL ROAD	RIVER STREET	RAIL LANE	Josephine Co.	Collector	ASPHALT	2	GRAVEL	55	NO	NO	NO	NO
LAUREL ROAD	REDWOOD HWY	OLD STAGE ROAD	Josephine Co.	Collector	ASPHALT	2	GRAVEL	55	NO	NO	NO	NO
LAUREL ROAD	OLD STAGE ROAD	WALTERS DRIVE N.	Josephine Co.	Collector	ASPHALT	2	GRAVEL	55	NO	NO	NO	NO
LAUREL ROAD	WALTERS DRIVE N.	RIVER STREET	Josephine Co.	Collector	ASPHALT	2	DITCH	55	NO	NO	NO	NO
LISTER STREET	KERBY AVE	HUSSEY AVE	Cave Junction	Collector	ASPHALT	2	ASPHALT	25	BOTH	NO	BOTH	BOTH
SHADOW BROOK DRIVE	RIVER STREET	END	Cave Junction	Local	ASPHALT	2	DITCH	25	NO	NO	NO	NO
JUNCTION AVE SOUTH	OREGON CAVES HWY	WATKINS STREET	Cave Junction	Local	ASPHALT	2	DITCH	25	LEFT	NO	RIGHT	NO
WELLS DRIVE	OLD STAGE DRIVE	END	Cave Junction	Local	ASPHALT	2	ASPHALT	25	BOTH	NO	BOTH	BOTH
REDWOOD HWY	WATKINS STREET	OREGON CAVES HWY	ODOT	Arterial	ASPHALT	4	ASPHALT	30	BOTH	NO	BOTH	LEFT
WATKINS STREET	HUSSEY AVE	REDWOOD HWY	Cave Junction	Collector	ASPHALT	2	ASPHALT	25	RIGHT	NO	BOTH	NO
REDWOOD HWY	LAUREL ROAD	RIVER STREET	ODOT	Arterial	ASPHALT	2	ASPHALT	45	NO	NO	NO	NO
HONEYBEE LANE	OLD STAGE ROAD	Bumble Bee Lane	Cave Junction	Local	ASPHALT	2	DITCH	25	NO	NO	NO	NO
	Bumble Bee Lane	Honey Bee	Cave Junction	Local	ASPHALT	2	DITCH	25	NO	NO	NO	NO
	Honey Bee	END	Cave Junction	Local	ASPHALT	2	DITCH	25	NO	NO	NO	NO
REDWOOD HWY	NORTH UGB	LAUREL ROAD	ODOT	Arterial	ASPHALT	2	ASPHALT	55	NO	NO	NO	NO
WATKINS STREET	CAVES AVE	JUNCTION AVE	Cave Junction	Collector	ASPHALT	2	ASPHALT	25	RIGHT	NO	LEFT	LEFT
OLLIS ROAD	RIVER STREET	END	Cave Junction	Private	ASPHALT	2	DITCH	25	NO	NO	NO	NO
KERBY AVE	PALMER STREET	RIVER STREET	Cave Junction	Local	ASPHALT	2	ASPHALT	25	RIGHT	NO	RIGHT	BOTH
KERBY AVE	LISTER STREET	PALMER STREET	Cave Junction	Local	ASPHALT	2	ASPHALT	25	RIGHT	NO	RIGHT	BOTH
REDWOOD HWY	RIVER STREET	PALMER STREET	ODOT	Arterial	ASPHALT	4	ASPHALT	30	BOTH	NO	BOTH	BOTH
SAWYER AVE SOUTH	SCHUMACHER STREET	LISTER STREET	Cave Junction	Local	ASPHALT	2	GRAVEL	25	NO	NO	NO	BOTH
WATKINS STREET	REDWOOD HWY	CAVES AVE	Cave Junction	Collector	ASPHALT	2	ASPHALT	25	RIGHT	NO	BOTH	NO
REDWOOD HWY	LISTER STREET	WATKINS STREET	ODOT	Arterial	ASPHALT	4	ASPHALT	30	BOTH	NO	BOTH	LEFT
REDWOOD HWY	PALMER STREET	LISTER STREET	ODOT	Arterial	ASPHALT	4	ASPHALT	30	BOTH	NO	BOTH	BOTH
RIVER STREET	SHADOW BROOK DRIVE	OLD STAGE ROAD	Josephine Co.	Local	ASPHALT	2	ASPHALT	25	NO	BOTH	BOTH	NO
PALMER STREET	KERBY AVE	REDWOOD HWY	Cave Junction	Local	ASPHALT	2	ASPHALT	25	BOTH	NO	BOTH	BOTH
JUNCTION AVE SOUTH	JONATHAN COURT	BARLOW STREET	Cave Junction	Local	ASPHALT	2	ASPHALT	25	NO	NO	RIGHT	NO
RIVER STREET	OLD STAGE ROAD	LAUREL ROAD	Josephine Co.	Local	ASPHALT	2	ASPHALT	25	NO	LEFT	LEFT	NO
KERBY AVE	SCHUMACHER STREET	LISTER STREET	Cave Junction	Local	ASPHALT	2	ASPHALT	25	NO	NO	LEFT	BOTH
KERBY AVE	WATKINS STREET	SCHUMACHER STREET	Cave Junction	Local	ASPHALT	2	GRAVEL	25	NO	NO	NO	LEFT
SCHUMACHER STREET	SAWYER AVE SOUTH	KERBY AVE	Cave Junction	Local	ASPHALT	2	ASPHALT	25	LEFT	NO	BOTH	BOTH

CAVE JUNCTION ROADWAY INVENTORY

HUSSEY AVE	SCHUMACHER STREET	LISTER STREET	Cave Junction	Local	ASPHALT	2	GRAVEL	25	NO	NO	NO	NO
HUSSEY AVE	WATKINS STREET	SCHUMACHER STREET	Cave Junction	Local	ASPHALT	2	GRAVEL	25	NO	NO	NO	NO
WATKINS STREET	KERBY AVE	HUSSEY AVE	Cave Junction	Collector	ASPHALT	2	ASPHALT	25	RIGHT	NO	BOTH	RIGHT
SCHUMACHER STREET	KERBY AVE	HUSSEY AVE	Cave Junction	Local	ASPHALT	2	ASPHALT	25	NO	NO	RIGHT	RIGHT
RIVER STREET	SAWYER AVE NORTH	KERBY AVE	Cave Junction	Local	ASPHALT	2	ASPHALT	25	LEFT	NO	BOTH	RIGHT
TERRACE DRIVE	JUNCTION AVE NORTH	END	Cave Junction	Local	ASPHALT	2	DITCH	25	NO	NO	NO	NO
LISTER STREET	BOUNDARY AVE	SAWYER AVE SOUTH	Cave Junction	Collector	ASPHALT	2	NONE	25	NO	NO	NO	NO
RIVER STREET	JUNCTION AVE NORTH	SHADOW BROOK DRIVE	Cave Junction	Local	ASPHALT	2	ASPHALT	25	NO	BOTH	BOTH	NO
BARLOW STREET	JUNCTION AVE SOUTH	SHERWOOD AVE	Cave Junction	Local	ASPHALT	2	DITCH	25	NO	NO	NO	NO
BARLOW STREET	HAMILTON AVE	JUNCTION AVE SOUTH	Cave Junction	Local	ASPHALT	2	DITCH	25	NO	NO	NO	NO
LISTER STREET	SAWYER AVE SOUTH	KERBY AVE	Cave Junction	Collector	ASPHALT	2	NONE	25	LEFT	NO	BOTH	BOTH
JONATHAN COURT	JUNCTION AVE SOUTH	END	Cave Junction	Local	ASPHALT	2	DITCH	25	NO	NO	NO	NO
FREDRICK COURT	OREGON CAVES HWY	END	Cave Junction	Local	ASPHALT	2	DITCH	25	NO	NO	NO	NO
RIVER STREET	CAVES AVE	JUNCTION AVE NORTH	Cave Junction	Local	ASPHALT	2	ASPHALT	25	NO	BOTH	BOTH	NO
RAYMOND STREET	JUNCTION AVE SOUTH	SHERWOOD AVE	Cave Junction	Local	ASPHALT		DITCH	25	NO	NO	NO	NO
LISTER STREET	HUSSEY AVE	REDWOOD HWY	Cave Junction	Collector	ASPHALT	2	ASPHALT	25	BOTH	NO	BOTH	BOTH
RIVER STREET	REDWOOD HWY	CAVES AVE	Cave Junction	Local	ASPHALT	2	ASPHALT	25	NO	BOTH	BOTH	NO
JUNCTION AVE SOUTH	RAYMOND STREET	JONATHAN COURT	Cave Junction	Local	ASPHALT	2	ASPHALT	25	NO	NO	RIGHT	NO
RIVER STREET	TRACEY LANE	BOUNDARY AVE	Cave Junction	Local	ASPHALT	2	DITCH	25	NO	NO	NO	NO
RIVER STREET	KERBY AVE	REDWOOD HWY	Cave Junction	Local	ASPHALT	2	ASPHALT	25	LEFT	NO	BOTH	NG
JUNCTION AVE SOUTH	OREGON CAVES HWY	RAYMOND STREET	Cave Junction	Local	ASPHALT	2	ASPHALT	25	NO	NO	RIGHT	NO
RIVER STREET	OLLIS ROAD	TRACEY LANE	Private	Local	ASPHALT	2	DITCH	25	NO	NO	NO	NO
OREGON CAVES HWY	CAVES AVE	REDWOOD HWY	ODOT	Arterial	ASPHALT	2	ASPHALT	35	NO	NO	NO	NO
OREGON CAVES HWY	JUNCTION AVE	CAVES AVE	ODOT	Arterial	ASPHALT	2	ASPHALT	35	NO	NO	NO	NO
LISTER STREET	REDWOOD HWY	CAVES AVE	Cave Junction	Collector	ASPHALT	2	ASPHALT	25	RIGHT	NO	BOTH	BOTH
LISTER STREET	CAVES AVE	JUNCTION AVE NORTH	Cave Junction	Collector	ASPHALT	2	ASPHALT	25	RIGHT	NO	BOTH	BOTH
RIVER STREET	BOUNDARY AVE	SAWYER AVE NORTH	Cave Junction	Local	ASPHALT	2	ASPHALT	25	NO	NO	RIGHT	RIGHT
RIVER STREET	DAISY HILL ROAD	OLLIS ROAD	Cave Junction	Local	ASPHALT	2	DITCH	25	NO	NO	NO	NO
OREGON CAVES HWY	OLD STAGE ROAD	JUNCTION AVE	ODOT	Arterial	ASPHALT	2	ASPHALT	35	NO	NO	NO	NO
OREGON CAVES HWY	FREDRICK COURT	OLD STAGE ROAD	ODOT	Arterial	ASPHALT	2	ASPHALT	35	NO	NO	NO	NO
OREGON CAVES HWY	DOGWOOD LANE	FREDRICK COURT	ODOT	Arterial	ASPHALT	2	ASPHALT	45	NO	NO	NO	NO
ADDISON LANE	OLD STAGE DRIVE	END	Cave Junction	Local	ASPHALT	2	ASPHALT	25	BOTH	NONE	BOTH	BOTH
OREGON CAVES HWY	EAST UGB	LAUREL ROAD	ODOT	Arterial	ASPHALT	2	GRAVEL	55	NO	NO	NO	NO
OREGON CAVES HWY	LAUREL ROAD	DOGWOOD LANE	ODOT	Arterial	ASPHALT	2	GRAVEL	45	NO	NO	NO	NO
OLD STAGE ROAD	HANBY LANE	HONEYBEE LANE	Josephine Co.	Collector	ASPHALT	2	DITCH	30	NO	NO	NO	NO
OLD STAGE ROAD	HONEYBEE LANE	RIVER STREET	Josephine Co.	Collector	ASPHALT	2	DITCH	30	NO	NO	NO	NO
OLD STAGE ROAD	ADDISON LANE	SOUTH UGB	Josephine Co.	Collector	ASPHALT	2	DITCH	25	NO	NO	NO	NO
OLD STAGE ROAD	FIR DRIVE	MADRONA DRIVE	Josephine Co.	Collector	ASPHALT	2	DITCH	30	NO	NO	NO	NO
OLD STAGE ROAD	MADRONA DRIVE	OREGON CAVES HWY	Josephine Co.	Collector	ASPHALT	2	DITCH	30	NO	NO	NO	NO
OLD STAGE ROAD	OREGON CAVES HWY	WELLS DRIVE	Josephine Co.	Collector	ASPHALT	2	DITCH	30	NO	NO	NO	NO
TRACY LANE	RIVER STREET	END	Cave Junction	Local	ASPHALT	2	DITCH	25	NO	NO	NO	NO
OLD STAGE ROAD	OAK STREET	FIR DRIVE	Josephine Co.	Collector	ASPHALT	2	DITCH	30	NO	NO	NO	NO
OLD STAGE ROAD	LAUREL ROAD	HANBY LANE	Josephine Co.	Collector	ASPHALT	2	DITCH	30	NO	NO	NO	NO
OLD STAGE ROAD	WELLS DRIVE	ADDISON LANE	Josephine Co.	Collector	ASPHALT	2	DITCH	25	NO	NO	NO	NO



## CAVE JUNCTION ROADWAY INVENTORY

OLD STAGE ROAD	RIVER STREET	OAK STREET	Josephine Co.	Collector	ASPHALT	2	DITCH	30	NO	NO	NO	NO
HAMILTON AVE	RAYMOND STREET	REDWOOD HWY	City/County*	Local	ASPHALT	2	DITCH	25	NO	NO	NO	NO
HAMILTON AVE	BARLOW STREET	RAYMOND STREET	City/County*	Local	ASPHALT	2	DITCH	25	NO	NO	NO	NO
WATKINS STREET	WEST UGB	KERBY AVE	Cave Junction	Collector	ASPHALT	2	ASPHALT	25	NO	NO	NO	NO
CAVES AVE	LISTER STREET	RIVER STREET	Cave Junction	Local	ASPHALT	2	DITCH	25	NO	NO	NO	NO
CAVES AVE	WATKINS STREET	LISTER STREET	Cave Junction	Local	ASPHALT	2	ASPHALT	25	NO	NO	RIGHT	RIGHT
HUSSEY AVE	MILLIE STREET	STEVENSON STREET	Cave Junction	Local	ASPHALT	2	GRAVEL	25	NO	NO	NO	NO
HUSSEY AVE	RIVER STREET	MILLIE STREET	Cave Junction	Local	ASPHALT	2	GRAVEL	25	NO	NO	NO	NO
CAVES AVE	OREGON CAVES HWY	WATKINS STREET	Cave Junction	Local	ASPHALT	2	DITCH	25	NO	NO	NO	NO
MILLE STREET	SAWYER AVE	HUSSEY AVE	Cave Junction	Local	ASPHALT	2	DITCH	25	NO	NO	NO	NO
STEVENSON STREET	SAWYER AVE	HUSSEY AVE	Cave Junction	Local	ASPHALT	2	DITCH	25	NO	NO	NO	NO
RAYMOND STREET	HAMILTON AVE	JUNCTION AVE SOUTH	Cave Junction	Local	GRAVEL	2	DITCH	25	NO	NO	NO	NO
LILAC LANE	MADRONA DRIVE	FIR DRIVE	Private	Local	GRAVEL	1	NONE	25	NO	NO	NO	NO
LILAC LANE	FIR DRIVE	OAK DRIVE	Private	Local	GRAVEL	1	NONE	25	NO	NO	NO	NO
MANZANITA LANE	MADRONA DRIVE	FIR DRIVE	Private	Local	DIRT	1	NONE	25	NO	NO	NO	NO
MADRONA DRIVE	DOGWOOD LN	END	Private	Local	GRAVEL	1	NONE	25	NO	NO	NO	NO
DOGWOOD LN	MADRONA DRIVE	FIR DRIVE	Private	Local	GRAVEL	2	NONE	25	NO	NO	NO	NO
MADRONA DRIVE	HAZELNUT	DOGWOOD LN	Private	Local	GRAVEL	1	NONE	25	NO	NO	NO	NO
FIR DRIVE	HAZELNUT	DOGWOOD LN	Private	Local	GRAVEL	2	NONE	25	NO	NO	NO	NO
DOGWOOD LN	OREGON CAVES HWY	MADRONA DRIVE	Private	Local	GRAVEL	2	NONE	25	NO	NO	NO	NO
FIR DRIVE	LILAC LANE	MANZANITA LANE	Private	Local	GRAVEL	2	NONE	25	NO	NO	NO	NC
MANZANITA LANE	FIR DRIVE	OAK DRIVE	Private	Local	GRAVEL	1	NONE	25	NO	NO	NO	NO
MADRONA DRIVE	LILAC LANE	MANZANITA LANE	Private	Local	GRAVEL	2	NONE	25	NO	NO	NO	NO
MADRONA DRIVE	MANZANITA LANE	HAZELNUT	Private	Local	GRAVEL	1	NONE	25	NO	NO	NO	NO
FIR DRIVE	OLD STAGE ROAD	LILAC LANE	Private	Local	GRAVEL	2	DITCH	25	NO	NO	NO	NO
OAK DRIVE	DOGWOOD LN	END	Private	Local	GRAVEL	1	DITCH	25	NO	NO	NO	NO
OAK DRIVE	HAZELNUT	DOGWOOD LN	Private	Local	GRAVEL	1	DITCH	25	NO	NO	NO	NO
MADRONA DRIVE	OLD STAGE ROAD	LILAC LANE	Private	Local	GRAVEL	2	NONE	25	NO	NO	NO	NC
FIR DRIVE	DOGWOOD LN	END	Private	Local	GRAVEL	2	NONE	25	NO	NO	NO	NO
OAK DRIVE	MANZANITA LANE	HAZELNUT	Private	Local	GRAVEL	1	DITCH	25	NO	NO	NO	NO
OAK DRIVE	LILAC LANE	MANZANITA LANE	Private	Local	GRAVEL	1	DITCH	25	NO	NO	NO	NO
OAK DRIVE	OLD STAGE ROAD	LILAC LANE	Private	Local	GRAVEL	1	DITCH	25	NO	NO	NO	NO
HANBY LANE	OLD STAGE ROAD	END	Private	Local	GRAVEL	1	NONE	25	NO	NO	NO	NO
DOGWOOD LN	FIR DRIVE	OAK DRIVE	Private	Local	GRAVEL	2	NONE	25	NO	NO	NO	NO
FIR DRIVE	MANZANITA LANE	HAZELNUT	Private	Local	GRAVEL	2	NONE	25	NO	NO	NO	NO
CARL DRIVE	CHANGES TO WALTERS DRIVE		Private	Local	PRIVATE							
CARL DRIVE	JUNE DRIVE	WALTERS DRIVE	Private	Local	PRIVATE							
JUNE DRIVE	CARL DRIVE	EAST UGB	Private	Local	GRAVEL	2	DITCH	25	NO	NO	NO	NO
JUNE DRIVE	WEST UGB	CARL DRIVE	Private	Local	GRAVEL	2	DITCH	25	NO	NO	NO	NO
HAZELNUT ST	MADRONA DRIVE	FIR DRIVE	Private	Local	GRAVEL	1	NONE	25	NO	NO	NO	NO
HAZELNUT ST	FIR DRIVE	OAK DRIVE	Private	Local	GRAVEL	1	NONE	25	NO	NO	NO	NO
FARRIS LANE	BARLOW STREET	END	Private	Local	ASPHALT	2	GRAVEL	25	NO	NO	RIGHT	NO
DAISY HILL ROAD	RIVER STREET	END	County		GRAVEL	2	DITCH	25	NO	NO	NO	NO
RAIL LANE	LAUREL ROAD	END	Private	Local	PRIVATE							
WALTERS DRIVE E.	WALTERS DRIVE N	END	Private	Local	PRIVATE							

## **APPENDIX B - PAVEMENT MANAGEMENT SYSTEMS**

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For the purposes of this analysis, the following four conditions were used to rate the pavements: Excellent - Good - Fair - Poor. The following definitions were adapted from the Oregon Department of Transportation's "Definition of Pavement Condition Categories for Non-National Highway System Asphalt Pavements." The State of Oregon uses a five-category condition rating system. The definitions of the five categories were condensed into the following four-category condition rating system.

### **Asphalt Rating System**

Excellent	Stable, no cracking, no patching, no deformation. Excellent riding qualities. Nothing would improve the roadway at this time.
Good	Stable, minor cracks. Minor patching and possibly some minor deformation evident. Dry or light colored appearance. Good riding qualities.
Fair	Generally stable with some areas of instability. Areas of structural weakness and/or minor structural deficiency. Cracking is more pronounced, patched but not excessively. Deformation more pronounced and easily noticed. Riding qualities range from acceptable to poor.
Poor	Large areas of instability, with some areas in extremely deteriorated condition. Large crack patterns, heavy and numerous patches, large areas of structural deficiency, deformation very noticeable. Ride qualities range from poor to unacceptable.

The asphalt conditions carry certain requirements for maintenance and rehabilitation.

### **Asphalt Maintenance Requirements**

Excellent	Generally do not require any maintenance
Good	May require preservative treatments (seal coatings) and minor routine maintenance such as crack sealing
Fair	May require structural improvements, overlays or recycling, or seal coats
Poor	May require structural improvements or total reconstruction

Objectives that can be accomplished at the planning and budgeting level with a properly designed and implemented pavement maintenance system include:

- Network Condition Assessment
- Inspection Scheduling
- Rehabilitation Plan
- Annual Budget Estimates and Optimization

Project Identification and Ranking  
Dollar Savings at the Project Level

A pavement maintenance / management system should do several things:

- be understood and operated by city personnel
- allow a condition inventory (time?) of all city streets using city personnel
- generate desired reports
- prioritize conditions
- allow input of nondestructive testing data
- provide maintenance suggestions and alternatives including cost data
- make deterioration projections
- include traffic data such as volume and type
- include road-use data

Some guidelines for implementing a PMS (of many):

- determine short and long-range goals, review these goals regularly
- distinguish between network and project level objectives.

# APPENDIX C - FEDERAL, STATE, AND LOCAL FUNDING SOURCES

The following tables describe federal, state, and City programs that may be used to finance transportation facility improvements and maintenance. Local funding mechanisms are presented to suggest how the City of Cave Junction might develop its own specialized program to fund specific transportation facility needs.

## Federal Funding Sources

Program Name	Description	Potential For Cave Junction
<p><i>Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21)</i></p>	<p>The Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) was signed into law by President Clinton on June 9, 1998. It is the successor to The Intermodal Surface Transportation Efficiency Act (ISTEA) that had been passed in 1991. The purpose of ISTEA was "to develop a National Intermodal Transportation System that is economically efficient, environmentally sound, provides the foundation for the Nation to compete in the global economy and will move people and goods in an energy efficient manner". The Act includes four objectives:</p> <ol style="list-style-type: none"> <li>1. Half of all federal funding is flexible for highways, transit or other uses;</li> <li>2. Decisions about how to use funds are made through inclusive and honest planning at the state and metropolitan levels;</li> <li>3. Significant funding is reserved for maintenance of existing highway, bridge and transit systems; and</li> <li>4. A small but important sum is set aside to support alternatives to the highway system and reduce its negative effects on society.</li> </ol>	<p>The guidelines in TEA-21 are oriented to larger metropolitan areas, but some of its provisions are directly related to smaller communities, and others indirectly relate. At a minimum, small community plans must be consistent with county and state plans.</p> <p>City should coordinate with the RVCOG, ODOT's Region 3 Office, and the Jackson / Josephine Transportation Committee to identify suitable local projects.</p>

<p><i>Surface Transportation Program (STP)</i></p>	<p>Authorized under ISTEA, Title I. Funds are allocated to State for suballocation to cities and counties on a formula basis by the transportation Commission. STP funds may be used for any road which is not functionally classified as a local or rural minor collector, and must be included in the State's Transportation Improvement Program to receive STP Funds.</p>	<p>Eligible cities may propose that a project which meets program criteria be included in the biennial State Transportation Improvement Program (STIP).</p> <p>The City should coordinate with the RVCOG, the Jackson/Josephine Transportation Committee and ODOT's Region 3 Office.</p>
<p><i>Transportation Enhancement Program (STP Element)</i></p>	<p>Eligible projects must relate to the Intermodal transportation system. Enhancements may include pedestrian or bicycle related activities, scenic beautification or landscaping, outdoor advertising control, acquisition of scenic easements and historical sites, the rehabilitation and operation of historic transportation facilities archaeological planning and research, and mitigation of pollution caused by runoff from a highway,</p>	<p>Enhancement projects meeting program criteria should be submitted to ODOT Region 3 for screening and prioritization by the ODOT Transportation Enhancement Committee. Approved projects will be placed in the STIP.</p> <p>The City should contact the RVCOG, the Jackson/Josephine Transportation Committee and ODOT's Region 3 Office.</p>
<p><i>Highway Enhancement System (HES)</i></p>	<p>A program sponsored by the Federal Highway Administration (FHWA), the Highway Enhancement System program provides funding for the development of safety improvement projects on public roads.</p> <p>Projects do not have to be part of the State Highway Improvement Program to receive HES funding. They should be either a part of the annual element of the Regional Transportation Plan, or on the annual list of rural ODOT projects.</p>	<p>The City should coordinate with the RVCOG, the Jackson/Josephine Transportation Committee, and ODOT's Region 3 Office to identify projects suitable for ISTEA funding.</p>

<p><i>Timber Receipts (USFS)</i></p>	<p>The United States Forest Service (USFS) shares 25% of national forest receipts with counties. Oregon law (ORS 294.060) requires that counties allocate 75% of the funds received from the federal government to the road fund, and 25% to local school districts. Timber receipts from O &amp; C lands do not go into the road fund</p>	<p>USFS revenues have permitted Josephine County to make significant capital improvements to its road system. A reduction in the flow of these revenues shall impact the future level of capital improvements which the County will be able to make. The road fund is used for maintaining and improving County roads within the City's UGB. Although fund availability will be significantly diminished in future years, the City may continue to request County support for needed maintenance and improvements of such roads within the its UGB.</p>
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### State Funding Sources

Program Name	Description	Potential for Cave Junction
<p><i>State Highway Fund (SHF)</i></p>	<p>The SHF is composed of gas taxes, vehicle registration fees, and freight carrier weight-mile tax assessments. In 1994, the State gas tax was \$0.24/gallon. Vehicle registration fees were set at \$15/annum. Revenues are divided as follows: 15.57% to cities, 24.38% to counties, and 60.05% to the State Highway Division. A city's share of the SHF is based on population. Both the City of Cave Junction and Josephine County use the proceeds from the SHF for street maintenance purposes.</p>	<p>The City of Cave Junction received about \$40,000 in FY93. Revenues from this source are relatively stable. The SHF is, however, not indexed for inflation. This could result in a decrease in available funds if taxes are not increased. In view of this, the per capita allocation of SHF revenues are not anticipated to increase significantly. The City should use this source of funding for maintenance purposes only.</p>
<p><i>Special Public Works Funds (SPWF)</i></p>	<p>A portion of the State Lottery revenues are allocated, through the Oregon Economic Development Department, to fund SPWF projects to construct, improve and repair infrastructure in support of local economic development and the creation of new jobs.</p>	<p>The City may use SPWF for the development of infrastructure to support an industrial or commercial project.</p>

<p><i>Traffic Control Projects (TCP)</i></p>	<p>The State maintains a policy of sharing the installation, maintenance and operational costs of traffic signals and street lights at the intersection of a State highway and a city or county road. A Statewide priority list is maintained by the Oregon State Highway Division for future projects. The priority system is based on "warrants" which are described in the "Manual for Uniform Traffic Control Devices." Local agencies are responsible for coordinating the Statewide signal priority list with local requirements.</p>	<p>The TCP program provides opportunities to fund projects which meet specific program criteria. The City of Cave Junction should coordinate with the RVCOG, ODOT's Regional office, and the Jackson / Josephine Transportation Committee to identify projects suitable for ISTEA funding.</p>
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<p><i>Bikeway Projects</i></p>	<p>At least one per cent of all State Highway Fund monies received by the Highway Division, counties and cities should be expended for the development of bikeways and footpaths (ORS 366.514). The Highway Division administers funds for bikeways and footpaths. They are responsible for providing technical assistance and recommendations to local governments, as well as the review of plans, specifications, engineering review and construction supervision.</p>	<p>Program funds are available for projects which meet program criteria. The City should coordinate with ODOT's Region 3 Office to identify projects for funding consideration.</p>
<p><i>Community Transportation Program (CTP)</i></p>	<p>The CTP provides grant assistance for transportation programs tailored to meet the needs of seniors (age 60 and older), people with disabilities and the general public. The CTP administratively coordinates funding for two programs which were previously funded separately: Special Transportation Grants (STG), and the Small City and Rural Area Capital Assistance Program (SCRACAP).</p> <p>The CTP provides ongoing revenue to transportation districts, counties, cities or non-profit groups to finance transportation services. Private transportation companies may participate through service agreements with local government. The fund may be used for the creation, maintenance or expansion of transportation services for the elderly and disabled.</p>	<p>The CTP uses federal, State and local matching funds. An 80%/20% matching ratio is available for capital purchase, planning and construction projects. Funds requested for operational use are matched at a 50% ratio.</p> <p>CTP funds are distributed to eligible districts and counties in the following manner:</p> <ul style="list-style-type: none"> <li>a. Three fourths of the fund is based on population.</li> <li>b. A minimum allocation of \$15,000.</li> <li>c. An annual administrative allocation of \$2,000.</li> <li>d. All remaining funds are deposited with the State STG account.</li> </ul>



<p><i>Immediate Opportunity Fund (IOF)</i></p>	<p>Sponsored by the Oregon Department of Economic Development, the IOF is intended to support economic development opportunities by influencing the location or retention of a firm, or economic development opportunities. The fund may only be used when other sources are unavailable or insufficient.</p> <p>To be eligible, a project must require an immediate commitment of funding to pay for road improvements, the lack of which would otherwise result in the loss of an economic development opportunity or the inability to retain an economic generator with the resulting loss of existing or potential jobs.</p>	<p>The IOF is funded \$1 million/year. The maximum funding for a single project is \$500,000, or 10% of the annual program level, whichever is greater.</p> <p>Matching funds are required by the Oregon Transportation Commission, and may be provided by either public or private sources. Donations of rights-of-way may be considered in lieu contributions. Preference is given to project proposals offering a match of at least 50%</p> <p>Retention of economic generators is a major focus of the IOF. The City should contact the regional OEDD office to determine if it is eligible for grants under this program.</p>
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**Local Funding Sources**

Program Name	Description	Potential for Cave Junction
<p><i>Special Assessments/Local Improvement Districts</i></p>	<p>Special assessments are charges levied on property owners for public improvements and services. Property owners who receive project benefits are assessed a portion of the project's cost. Assessment Districts are used to fund street lighting, paving, drainage sewers, parking and landscaping. The beneficial users form the "group" which is assessed. Normally, a user group is defined, they are queried, and vote on formation. Although some "users" may not vote in favor, they are bound by the majority. The percentage of supporters required to establish a district is set by law.</p> <p>Local Improvement Districts (LID) are a "variation of a Special Assessment District. They are designed to fund public benefits which accrue to a limited number or group of citizens. An example</p>	<p>Special assessments for transportation benefits may be difficult due to the individual needs and habits of residents. Designing a fee structure which recognizes these differences would be very difficult to administer. If the community, as a whole, is to be the beneficiary, formation of the "district" should be put to the voters. LIDs are inherently easier to form since the number of beneficial users is restricted.</p> <p>The City of Cave Junction could consider using special assessments or LIDs to finance transportation improvements whenever property owner support is assured.</p>

	<p>of this may be a community water meter, or special street lighting designed to instill a uniqueness to a particular subdivision.</p> <p>A properly drafted special assessment district can fall outside of the Measure 5 property tax limits. Special Assessments are a reliable funding source.</p>	
<i>Systems Development Charges (SDC)</i>	<p>SDCs or "impact fees" reflect the cost of infrastructure necessary to support new development. They should take into account the effect that new development has on school facilities, sanitary and storm water systems, etc. Considered as a "cost of doing business" by developers, SDCs are actually "pass-through" costs which owners must absorb in the price they pay for their new homes.</p> <p>Numerous Oregon cities and counties use SDCs to fund transportation capacity improvements. They are authorized and limited by ORS 223.297-.314.</p> <p>The SDC is a logical and proven technique to finance the capacity expansion which development requires.</p>	<p>The financial capacity of an SDC depends upon the volume of development and the amount of the fee. SDCs are seldom set to enable full cost recovery. Based on a national average of \$1,329 per dwelling unit, the City could expect to generate \$66,450 from the sale of 50 residential building permits.</p> <p>The revenue produced by SDCs should be placed in escrow for public works improvements. Separate accounts should be maintained to reflect the percentage breakdown of the various categories included within the SDC structure.</p>
<i>Gasoline Tax</i>	<p>Cities have the authority, with the support of the electorate, to assess a local tax at the gasoline pump. This assessment would be in addition to existing federal and state taxes already in place.</p> <p>Tillamook and The Dalles are two Oregon cities with a local gas tax. Multnomah and Washington Counties also enacted local gas taxes.</p>	<p>Local gas taxes range typically from \$.01 to \$.03 per gallon. The funds generated annually by such a local tax could be added to the road fund for local improvements. This is an equitable way to fund transportation improvements. It is flexible, provides administrative ease, and as a "regressive" tax, effects all users equally. Local adoption, however, would be a challenge. Voter opinion should be evaluated before bringing this revenue source.</p>
<i>Street Utility Fees (SUF)</i>	<p>Utility fees, whether for sewer, water, power, telephone, or cable</p>	<p>The City of Cave Junction could expect a stable, substantial income</p>

	<p>television, are well understood and accepted by residential customers. Many utility fees are charged by the municipality supplying the service.</p> <p>Street Utility Fees apply the same concepts to city streets. All businesses, industries and residences would be assessed on the basis of the street usage typically generated by the user. For example, a single family residence might generate, on average, 10 vehicle trips per day, while a retail establishment might generate 130 trips per 1,000 square feet of gross floor area. The retail property owner would be assessed a fee higher than the residential property owner because the business generated more street usage.</p> <p>Street User Fees differ from water and sewer fees because they can not be as precisely monitored. Standards such as traffic generation manuals and periodic review of the fee structure would resolve many user concerns.</p> <p>User fees are typically assigned to cover the maintenance cost. Appropriate ordinance wording would be necessary to allocate where and for what purpose the fees received should be spent.</p> <p>The City of Medford presently collects SUFs. Single family residential customers pay \$2/month. This generates an income of about \$1.3-million per year. In Ashland, SUFs generate \$200,000 per year based on residential customer fees of \$1.60/month.</p>	<p>stream to be produced from SUFs. This funding mechanism provides a relatively equitable approach to spreading the cost of streets maintenance among a majority of the people who use them.</p> <p>The City could expect that residential users would generate about \$13,632 in annual revenue based on each housing unit paying \$2.00 per month. (Using 1990 Census Count of 568 housing units) Commercial property users would generate from 60% to 100% of this amount, or about \$8,179 to \$13,632. The amount of money taken in each year would vary according to changes in the number of residences and the growth or decline of commercial and industrial development.</p>
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<p><i>Vehicle Registration Fees (VRF)</i></p>	<p>Counties are permitted by law to enact a vehicle registration fee structure. This would require approval by the electorate. A portion of the fees generated by such a program would be allocated to incorporated municipalities within such counties.</p> <p>VRFs are assessed on a vehicle basis. This makes them relatively equitable as a funding source for transportation facility maintenance or other related purpose.</p> <p>No Oregon counties have used VRFs. This may be due to the fact that voter support would be required at an election.</p>	<p>The City of Cave Junction could anticipate receiving an income stream of about \$15,600/year based on a \$10 annual vehicle registration fee. (.85 cars per person x 1,126 persons x \$10= \$9,571)</p> <p>Although this fee source is equitable and stable, it may not withstand the test of County voter approval.</p>
<p><i>Property Taxes (PT)</i></p>	<p>Oregon counties collect property taxes which are then distributed by formula as subventions to incorporated municipalities.</p> <p>Ballot Measure 5, placed an overall \$15 ceiling /\$1,000 in assessed value (\$5 of which is earmarked for schools). Any changes in the formula would require voter approval.</p> <p>The local electorate determines how the revenue should be allocated for the payment of City services. In 1986, Transportation facilities are a legitimate category for the expenditure of tax revenues.</p>	<p>While feasible, the need for voter approval to reallocate present tax revenues or to authorize a tax increase during the next biennium is the key factor limiting this source of funding for transportation needs.</p>
<p><i>Revenue Bonds</i></p>	<p>Cities have the legal authority to issue revenue bonds. These instruments are generally used to finance long term capital improvements. They involve a written promise to return principal at a future date, predicated on the payment of periodic interest until the bond matures. The revenue generated for payment of principal and interest should come from</p>	<p>The City of Cave Junction has the authority to sell revenue bonds. Bond Underwriters would analyze the reliability of the revenue stream to rate the issue and assign its interest rate. If the City is interested in using this means to fund a transportation facility, it should be indexed to a transportation related revenue stream.</p>

	<p>beneficiaries of the future improvements -- potential users rather than from the general public.</p> <p>The issuer of the bond is not legally required to levy taxes to avoid default if revenues are not sufficient to meet debt service. When Revenue Bonds are backed by the "full faith and credit" of the issuing agency they are called "indirect general obligation bonds."</p> <p>Cities may use revenues generated by the Oregon Highway Fund, a local gasoline tax, street utility fees, or other stable transportation related revenue stream to cover the debt service of bond designated to fund transportation facilities.</p>	
<p><i>General Obligation Bonds (GO)</i></p>	<p>Cities have the authority to issue GOs. These instruments fall outside the limitations established by Ballot Measure 5. They must have the approval of the electorate, and by so doing, accept the fact that the issuing authority (Municipal Bonds if issued by the City of Cave Junction) must pledge its "full faith and credit" to repay both interest and principal on a scheduled basis. Bond underwriters analyze the revenue stream to establish their interest rate.</p>	<p>GO bonds may be issued to pay for transportation improvements, or, as in Salem, for the purpose of funding street maintenance.</p> <p>They are repaid with revenues generated from property taxes. Since the revenue stream generated by these taxes is not based on the impact created by the transportation project being funded, GO bonds tend to be less equitable as a means to finance such improvements. This is especially so since there is no limitation on the amount of property taxes which may be levied in order to service bonded indebtedness.</p> <p>The requirement that the electorate must approve the use of GO bonds have ruled them out as funding sources in recent years. In other words, their use might be politically unacceptable in the City of Cave Junction.</p>

# APPENDIX D: MUNICIPAL CODE AMENDMENTS

## Title 12

### STREETS, SIDEWALKS AND PUBLIC PLACES

#### Chapters:

- 12.04 Street Plan
- 12.08 Street and Sidewalk Design Standards
- 12.12 Sidewalk Construction and Repair
- 12.16 Building Numbering System
- 12.20 Public Parks
- 12.24 Rights-of-way

#### Chapter 12.04

#### STREET PLAN

#### Sections:

12.04.010 Street design standards adopted.

12.04.010 Street design standards adopted. The city council adopts the following street design standards, also identified in the attached drawings:

<u>Street Classification</u>	<u>Street Class</u>	<u>Building Setbacks</u>	<u>Right-of-Way</u>	<u>Paving Width</u>	<u>Sidewalk</u>
Major arterial (Parking 2 sides with RH turn lane)	1	20'--40'	80'	70'	5 foot 2 sides
Minor arterial (No street parking with RH turn lane)	2	20'--40'	70'	60' 34-47'	6-8 foot 2 sides
Collector no. 1 (Parking 2 sides with RH turn lane)	3	10'--20'	60'	40' 34-44'	6 foot 2 sides
Collector no. 2 (Parking 2 sides with RH turn lane)	4	10'--20'	64'	44'	5 foot 2 sides

Local streets (Parking 2 sides)	5	10'--20'	50	36' 24-28'	5 foot 2 sides
Local streets (Parking 1 side)	6	10'--20'	50'	28'	5 foot 1 side
Local streets (Parking 2 sides)	7	10'-20'	50'	36'	5 foot 1 side
Neighborhood streets (25' R-O-W) (by approval of the city council for preexisting conditions only) (no street parking)	8	10'--20'	25'	20'	None or 5 foot 1 side
Cul-de-sac	V11-1	ord.	50'	40'	5 foot
Cul-de-sac (center parking)	V11-1	ord.	60'	50'	5 foot
Alleys	V11-1	10'W/O-P 20'WP	20'	10'	None

(Ord. 386 '1(part), 1997)

## Chapter 12.08

### STREET AND SIDEWALK DESIGN STANDARDS

#### Sections:

- 12.08.010 Streets proposed for acceptance in the city street system.
- 12.08.020 Base design.
- 12.08.030 Cul-de-sacs.
- 12.08.040 Driveways.
- 12.08.050 Culverts.
- 12.08.060 Drainage facilities.
- 12.08.070 Curbs and gutters.
- 12.08.080 Sidewalks.
- 12.08.090 Bicycle facilities.
- 12.08.100 Off-street parking.

12.08.010 Streets proposed for acceptance in the city street system. Any person or persons proposing to construct or reconstruct a street, sidewalk, driveway, street lights, curbs or gutters for acceptance into the city street system shall be responsible for submitting design and accomplishing construction in conformance with the standards and specifications contained or made reference to in this chapter. All materials and construction procedures shall conform to current Oregon State Highway Specifications. (Ord. 386 '1(part), 1997)

12.08.020 Base design. Different subgrade soils have different load bearing capacities which, in turn, could affect the design thickness of the base rock and surfacing elements of the road cross sections. The engineer may require a greater thickness design than shown in the standards if his engineering analysis so indicates.

Conversely, the engineer may consider lesser design thickness of base rock and surfacing when rock conditions are encountered in the subgrade or the developer submits an engineering analysis justifying the modification. (Ord. 386 '1(part), 1997)

12.08.030 Cul-de-sacs. Cul-de-sac streets shall be permitted only when there is no feasible connection with an adjacent street. (Ord. 386 '1(part), 1997)

12.08.040 Driveways. The portion of any driveway within the city street right-of-way shall be designed in accordance with the following standards:

- A. Minimum width: twelve feet;
- B. Vertical alignment shall be so designed as to maintain a level sidewalk and prevent stormwater from flowing down the driveway and onto the city street. (Ord. 386 '1(part), 1997)
- C. Driveway approaches must be designed and located to provide an exiting vehicle with an unobstructed view. Construction of driveways along acceleration or deceleration lanes and tapers shall be avoided due to the potential for vehicular weaving conflicts.
- D. The length of driveways shall be designed in accordance with the anticipated storage length for entering and exiting vehicles to prevent vehicles from backing into the flow of traffic on the public street or causing unsafe conflicts with on-site circulation.

12.08.050 Culverts. A. The property owner shall be responsible for furnishing all the material and labor necessary for the installation.

- B. The length of culvert to be installed shall be a minimum of twenty feet per property parcel.
- C. The city will inspect the installation of all culverts as to grade, materials and workmanship. Storm drain access and requirements will be installed as required by the city.
- D. The culvert will be either concrete or corrugated steel, with a minimum size of twelve inches. When corrugated steel is used, it will be at least sixteen gauge metal and meet APWA Standard Specifications.
- E. The minimum acceptable cover on the culvert shall be six inches. (Ord. 386 '1(part), 1997)

12.08.060 Drainage facilities. All cross drainage pipes shall be eighteen inches in diameter or larger. Drain pipes shall be placed in natural drainage areas where possible. When natural drainage is quite flat (under one percent), there shall be provided a drainage easement along the natural drainage course to insure continuity of drainage. (Ord. 386 '1(part), 1997)



12.08.070 Curbs and gutters. Curbs and gutters shall conform to standards and specifications. All curbs and gutters shall be standards Type "C" and meet APWA Standards. (Ord. 386 '1(part), 1997)

12.08.080 Sidewalks. Sidewalks are required on both sides of all new streets, except for local and neighborhood streets, Classes 6, 7 and 8. Upon major reconstruction, existing collector and arterial streets shall include sidewalks on both sides of the street; except under special conditions, including, but not limited to, inadequate right-of-way and topographic constraints. In which case, existing streets may be reconstructed to include a sidewalk on one side of the street. Sidewalks shall connect with, or provide for future connection with existing pedestrian paths located on, or proposed to be located on dedicated city streets. The city may require the developer to improve dedicated rights-of-way adjacent to the project site with sidewalks, or make "in lieu,, payments or other suitable guarantees for their future construction. Any funds or other suitable guarantees collected shall be placed in escrow for this purpose. Connection to the public street system shall take into consideration the state's access management standards, and be designed to the satisfaction of the city. (Ord. 386 '1(part), 1997)

12.08.090 Bicycle facilities. Bicycle facilities shall be designed and constructed consistent with the design standards in the Oregon Bicycle and Pedestrian Plan, 1995 and the AASHTO "Guide for the Development of Bicycle Facilities, 1991." Bikeways are required where feasible and practical on new arterial and collector streets. Upon major reconstruction, existing collector and arterial streets shall include bikeways, except under special conditions, including but not limited to inadequate right-of-way and topographic constraints. Bicycle facilities shall connect with, or provide for future connection with bicycle and pedestrian paths located on, or proposed to be located on dedicated city streets. The city may require the developer to improve dedicated rights-of-way adjacent to the project site with bicycle facilities, or make in lieu payments or other suitable guarantees for their future construction. Any funds or other suitable guarantees collected shall be placed in escrow for this purpose. Connection to the public street system shall take into consideration the state's access management standards, and be designed to the satisfaction of the city. (Ord. 368 '3, 1996)

12.08.100 Off-street parking. A. All uses shall provide off-street parking facilities as required in Section 17.32.020(E), except when located within a special district organized to provide common public parking areas.

B. Bicycle parking facilities shall be incorporated into the approved parking lot design of commercial and industrial zoned property based on the following standards. The city may allow exemptions to required bicycle parking in connection with temporary uses or uses that are not likely to generate the need for bicycle parking.

1. Commercial Zones. One bicycle parking space for each five hundred square feet of net usable floor area;

2. Industrial Zones. One bicycle parking space for each one thousand square feet of gross usable floor area. (Ord. 386 '1(part), 1997)

## Chapter 12.12

### SIDEWALK CONSTRUCTION AND REPAIR

#### Sections:

- 12.12.010Definitions.
- 12.12.020Permit required.
- 12.12.030Application for permit.
- 12.12.040Supervision.
- 12.12.050Standards and specifications.
- 12.12.060Required sidewalk repairs.
- 12.12.070City may make repairs.
- 12.12.080Cost of repair--Lien--Foreclosure.
- 12.12.090Prohibited projections in public way.

12.12.010Definitions. Unless the context requires otherwise:

A "City recorder" means the city recorder or person authorized by the city recorder.

"Person" means a natural person, firm, corporation, or other legal entity.

"Planning department" means the planning department of Cave Junction.

"Sidewalk" means the part of the street right-of-way between the curblines or the lateral lines of a roadway and the adjacent property lines that is intended for the use of pedestrians. (Ord. 386 '1(part), 1997)

12.12.020Permit required. A. No person may construct, repair or alter a sidewalk without first applying for a permit.

B. Construction, repair or alteration of a sidewalk shall conform to the general standards and specifications established by ordinance and by resolution of the council as provided by Section 12.12.050. (Ord. 389 '1, 1998; Ord. 386 'I(part), 1997)

12.12.030Application for permit. A. A person shall file his application for a permit to construct, repair or alter a sidewalk on the forms provided by the city.

B. If the proposed sidewalk improvement conforms to the applicable standards and specifications, a permit shall be issued to the applicant.

## Title 16

### DESIGN STANDARDS AND IMPROVEMENTS

#### Chapters:

16.20 Design Standards and Improvements

16.24 Improvement Procedures

#### Chapter 16.20

### DESIGN STANDARDS AND IMPROVEMENTS

#### Sections:

16.20.010Definitions.

- 16.20.020 Creation of a public street outside a partition or a subdivision.
- 16.20.030 Creation of a private street outside a partition or a subdivision.
- 16.20.040 Requirements of survey and plat of partitions and subdivisions.
- 16.20.050 Bond.
- 16.20.060 Principles of acceptability.
- 16.20.070 Streets.
- 16.20.080 Blocks.
- 16.20.090 Building sites.
- 16.20.100 Grading of building sites.
- 16.20.110 Building lines.
- 16.20.120 Large building sites.
- 16.20.130 Improvement procedures.
- 16.20.140 Specifications for improvements.
- 16.20.150 Improvements in subdivisions.
- 16.20.160 Recommendation for assessment.
- 16.20.170 Subdivision improvements.
- 16.20.180 Improvements in partitions.
- 16.20.190 Exceptions in cases of a planned unit development.

16.20.010 Definitions. As used in this title:

"Building line" means a line on a map, plan or plat beyond which buildings or structures may not be erected.

"City" means the city of Cave Junction, Oregon.

ACJMC" means the Cave Junction Municipal Code.

"Development plan" means a city plan for the guidance of growth and improvement of the city, modifications or refinements.

"Easement" means a grant of the right to use a strip of land for specific purposes.

"Lot" means a single unit of land that is created by a subdivision of land.

1. "Corner lot" means a lot with at least two intersecting sides which abut streets other than alleys, provided the angle of intersection does not exceed one hundred thirty-five degrees.

2. "Reversed corner lot" means a corner lot, the side street line of which is substantially a continuation of the front line of the first lot to its rear.

3. "Through lot" means a lot having frontage on two parallel or approximately parallel streets other than alleys.

"Map" means a final diagram, drawing or writing concerning a land division.

"Parcel" means a single unit of land created by partitioning land.

"Partition" means an act of partitioning land or an area or tract of land partitioned.

1. "Major partition" means a partition which includes the creation of a street.

2. "Minor partition" means a partition that does not include the creation of a street.

"Partition land" means to divide land into two or three parcels of land within a calendar year, but does not include:

1. A division resulting from a lien foreclosure, foreclosure of a recorded contract for the sale of real property or the creation of cemetery lots;

2. The adjustment of a property line by relocation of a common boundary where an additional unit of land reduced in size by the adjustment complies with any applicable zoning ordinance;

3. The division of land resulting from the recording of a subdivision or condominium plat;

4. A sale or grant by a person to a public agency or public body or state highway, county road, city street or other right-of-way purposes provided such complies with the comprehensive plan and ORS 215.213(2)(p) to (r) and 215.283 (2) (p) to (r).

"Pedestrian way" means a right-of-way for pedestrian traffic.

"Person" means a natural person, firm, corporation, partnership, social or fraternal organization, association, trust, estate, receiver, syndicate, branch of government, or any group or combination acting as a unit.

"Planning commission" means the planning commission of Cave Junction.

"Planning department" means the planning department of Cave Junction.

"Plat" means and includes the final map, diagram, drawing and all other information concerning a subdivision, partition or replat.

"Right-of-way" means the area between boundary lines of a street or other easement.

"Road" or "roadway" means a public or private way that is created to provide ingress or egress for persons to one or more lots, parcels, areas or tracts of land.

"Sidewalk" means a pedestrian walkway with permanent surfacing.

"Street" means a public or private way that is created to provide ingress or egress for persons to one or more lots, parcels, areas or tracts of land and including the term "road," "highway," "lane," "avenue," "alley" or similar designations.

1. "Alley" means a narrow street through a block primarily for vehicular service access to the back or side of properties otherwise abutting on another street.

2. "Arterial" means a street of considerable continuity which is a traffic artery for intercommunication among large areas.

3. "Collector" means a street supplementary to the arterial street system and intercommunication between this system and smaller areas, used to some extent for through traffic and to some extent for access to abutting properties.

4. "Cul-de-sac" (dead end street) means a short street having one end open to traffic and being terminated by a vehicle turnaround.

5. "Half-street" means a portion of the width of a street, usually along the edge of a subdivision, where the remaining portion of the street could be provided in another subdivision.

6. "Marginal access street" means a minor street parallel and adjacent to a major arterial street providing access to abutting properties, but protected from through traffic.

7. "Minor street" means a street intended primarily for access to abutting properties.

"Subdivide land" means to divide an area or tract of land into four or more lots within a calendar year when such area or tract of land exists as a unit or contiguous units of land under a single ownership at the beginning of such year.

"Subdivision" means either an act of subdividing land or an area or tract of land subdivided as defined in this section. (Ord. 387 '1(part), 1997)

16.20.020 Creation of a public street outside a -partition or a subdivision. Streets may be created through processes other than partitioning or subdividing provided the street is constructed according to approved standards, is officially accepted by the city or other governing body responsible for the street, and is deeded and/or recorded with county clerk in accordance with all applicable laws. Any property divided by such a street shall be considered one property until it is partitioned or subdivided with design standards in accordance with CJMC Chapter 12.08. (Ord. 387 '1(part), 1997)

16.20.030 Creation of a private street outside a -partition or a subdivision. A street which is created in order to allow the partitioning of land for the purpose of transfer of ownership or building development, whether immediate or future, shall be in the form of a street in a subdivision or as provided

in Section 16.20.020, except that a private street to be established by deed without full compliance with this title shall be approved by the planning commission provided it is the only reasonable method by which the rear portion of an unusually deep land parcel of a size to warrant partitioning into not over two parcels may be provided with access. A copy of the tentative plan to create the street and partition the tract shall be submitted to the city recorder at least five days prior to the planning commission meeting at which consideration is desired. The document and such information as may be submitted shall be reviewed by the planning commission and, if assurance of adequate utility, bicycle and pedestrian access, and vehicular access is indicated, shall be approved. (Ord. 387 '1(part), 1997)

16.20.040 Requirements of survey and plat of partitions and subdivisions. No person shall submit a plat of a partition or a subdivision for recording until all the requirements of ORS 209.250 and the requirements of lot line adjustments, partitions and subdivisions are met. (Ref CJMC "15.20.060(A)(2) and 15.24.090(B)(2).) (Ord. 387 '1(part), 1997)

16.20.050 Installation of improvements. All subdivision improvements shall be installed in accordance with Chapter 16.24, which allows for developer installed improvements or local improvement districts. (Ord. 387 '1(part), 1997)

16.20.060 Bond. A. The land divider shall file with the agreement, to assure his full and faithful performance thereof, one of the following:

1. A surety bond executed by a surety company authorized to transact business in the state in a form approved by the city attorney;
2. A personal bond cosigned by at least one additional person together with evidence of financial responsibility and resources of those signing the bond sufficient to provide reasonable assurance of ability to proceed in accordance with the agreement;
3. Cash.

B. Such assurance of full and faithful performance shall be for a sum approved by the city recorder as sufficient to cover the cost of the improvements and repairs, including related engineering and incidental expenses, and cover the cost of city inspection.

C. If the land divider fails to carry out the provision of the agreement and the city has unreimbursed costs or expenses or expenses resulting from such failure, the city shall call on the bond or cash deposit for reimbursement. If the amount of the bond or cash deposit exceeds cost and expenses incurred by the city, it shall release the remainder. If the amount of the bond or cash deposit is less than the cost and expenses incurred by the city, the land divider shall be liable to the city for the difference. (Ord. 387 '1(part), 1997)

16.20.070 Principles of acceptability. A land division, whether by a subdivision, creation of a street, or a partitioning, shall conform to any development plan, shall take into consideration any preliminary plans made in anticipation thereof, and shall conform to the design standards established in this title. (Ord. 387 '1(part), 1997)

16.20.080 Streets. A. General. The location, width and grade of streets shall be considered in their relation to existing and planned streets, to topographical conditions, to public convenience and safety, and to the proposed use of the land to be served by the streets. The street system shall assure an adequate traffic circulation system with intersection angles, grades, tangents and curves appropriate for the traffic to be carried considering the terrain. Where location is not shown in a development plan, the arrangements of streets shall either:

1. Provide for the continuation or appropriate projection of existing principal streets in surrounding areas; or
  2. Conform to a plan for the neighborhood approved or adopted by the planning commission to meet a particular situation where topographical or other conditions make continuance or conformance to existing streets impractical.
- B. Minimum Right-of-way and Paving Width. Unless otherwise indicated on the development plan, the street right-of-way and paving widths shall not be less than the minimum width in feet shown in the following table:

<u>Street Classification</u>	<u>Street Class</u>	<u>Building Setbacks</u>	<u>Right-of-Way</u>	<u>Paving Width</u>	<u>Sidewalk</u>
Major arterial (Parking 2 sides)	1	20'--40'	80'	70'	5 foot 2 sides
Minor arterial (No street parking)	2	20'--40'	70'	34-47'	6-8 foot 2 sides
Collector no. 1 (Parking 2 sides with RH turn lanes)	3	10'--20'	60'	34-44'	6 foot 2 sides
Collector no. 2 (Parking 2 sides)	4	10'--20'	64'	44'	5 foot 2 sides
Local streets (Parking 2 sides with RH turn lanes)	5	10'--20'	50'	35'	5 foot 2 sides
Local streets (Parking 1 side)	6	10'--20'	50'	28'	5 foot 1 side
Local streets (Parking 2 sides)	7	10'--20'	50'	36'	5 foot 1 side
Neighborhood streets (25' R-O-W) (by approval of the city council for preexisting conditions only) (no street parking)	8	10'--20'	25'	20'	None or 5 foot 1 side
Cul-de-sac	VII-1	ord.	50'	40'	5 foot
Cul-de-sac (center parking)	VII-2	ord.	60'	50'	5 foot

Alleys

VII-3

10'W/O-P 20'  
20'WP

10'

None

C. Where conditions, particularly topography, or the size and shape of the tract, make it impractical to otherwise provide buildable sites, narrower rights-of-way may be considered, ordinarily not less than fifty feet. If necessary, slope easements may be required.

D. Reserve Strips. Reserve strips or street plugs controlling access to streets will not be approved unless necessary to the protection of the public welfare or of substantial property rights and in these cases they may be required. The control and disposal of the land comprising such strips shall be placed within jurisdiction of the city under conditions approved by the planning commission.

E. Alignment. As far as is practical, streets other than minor streets shall be in alignment with existing streets by continuation of the centerlines thereof. Staggered street alignment resulting in T intersections shall, wherever practical, leave a minimum distance of two hundred feet between the centerlines of streets having approximately the same direction and, in no case, shall be less than one hundred feet.

F. Future Extension of Streets. Where necessary to give access to or permit a satisfactory future division of adjoining land, streets shall be extended to the boundary of the subdivision or partition and the resulting dead-end streets shall meet the requirements of the Illinois Valley fire district access road requirements. Reserve strips and street plugs may be required to preserve the objectives of street extensions.

G. Intersection Angles. Streets shall be laid out to intersect at angles as near to right angles as practical except where topography requires a lesser angle, but in no case shall the acute angle be less than eighty degrees unless there is a special intersection design. An arterial or collector street intersecting with another street shall have at least one hundred feet of tangent adjacent to the intersection unless topography requires a lesser distance. Intersections which contain an acute angle of less than eighty degrees or which include an arterial street shall have a minimum corner radius sufficient to allow for a roadway radius of twenty feet and maintain a uniform width between the roadway and the right-of-way line. Ordinarily, the intersection of more than two streets at any one point will not be approved.

H. Existing Streets. Whenever existing streets adjacent to or within a tract are of inadequate width, additional right-of-way shall be provided at the time of the land division. If any lot abuts a street right-of-way that does not conform to the design specifications of this ordinance, the owner may be required to dedicate up to one-half of the total right-of-way width required by this ordinance.

I. Half Street. Half streets, while generally not acceptable, may be approved where essential to the reasonable development of the subdivision or partition when in conformity with the other requirements of this title and when the planning commission finds it will be practical to require the dedication of the other half when adjoining property is divided. Wherever a half street is adjacent to a tract to be divided, the other half of the street shall be provided within such tract. Reserve strips and street plugs may be required to preserve the objectives of half streets.

J. Cul-de-sac. A cul-de-sac shall be as short as possible and shall have a maximum length of four hundred feet and serve not more than eighteen dwelling units. A cul-de-sac shall terminate with a circular turnaround.

K. Street Names. Except for the extensions of existing streets, no street names shall be used which will duplicate or be confused with the name of an existing street. Street names and numbers shall conform to the established pattern in the city and shall be subject to the approval of the planning commission.

L. Grades and Curves. Grades shall not exceed six percent on arterial, ten percent on collector streets or twelve percent on other streets. Centerline radii of curves shall not be less than three

hundred feet on major arterial, two hundred feet on secondary arterial or one hundred feet on other streets and shall be in multiples of ten feet. Where existing conditions, particularly the topography, make it otherwise impractical to provide building sites, the planning commission may accept steeper grades and sharper curves. In flat areas, allowance shall be made for the finished street grades having a minimum slope, preferably of at least one-half percent.

M. Marginal Access Streets. Where a land division abuts or contains an existing or proposed arterial street, the planning commission may require marginal access streets, reverse frontage lots with suitable depth, screen planting contained in a nonaccess reservation along the rear or side property line, or other treatment necessary for the adequate protection of residential properties and to afford separation of through and local traffic.

N. Alleys. Alleys shall be provided in commercial and industrial districts, unless other permanent provisions for access to off-street parking and loading facilities are approved by the planning commission. The corner of alley intersections shall have a radius of not less than twelve feet.

O. Sidewalks. Sidewalks shall be constructed according to the following guidelines. In no circumstance shall a sidewalk be constructed or reconstructed with an unobstructed travel path of less than five feet.

Land Use	(feet)	(feet)
Curb Setback		
Residential		
5	5	
Commercial		
6		5
Institutional		
6		5
Industrial		
5		5

(Ord. 387 I(part), 1997)

P. Connectivity: Minor collector and local residential access streets shall connect with surrounding streets to permit the convenient movement of traffic between residential neighborhoods or facilitate emergency access and evacuation. Connections shall be designed to avoid or minimize through traffic on local streets. Appropriate design and traffic control such as four-way stops and traffic calming measures are the preferred means of discouraging through traffic

16.20.090 Blocks. A. General. The length, width and shape of blocks shall take into account the need for adequate building site size and street width and shall recognize the limitations of the topography.

B. Size. No Block shall be more than one thousand two hundred feet in length between street corners unless it is adjacent to an arterial street or unless the topography or the location of adjoining streets justifies an exception. The recommended minimum length of blocks along an arterial street is one thousand eight hundred feet. A block shall have sufficient width to provide for two tiers of building sites unless topography or the location of adjoining streets justifies an exception.



C. Easements. Utility lines easements for sewers, water mains, electric lines or other public utilities shall be dedicated wherever necessary. The easements shall be at least ten feet wide and centered on lot or parcel lines except for utility pole tieback easements which may be reduced to six feet in width.

D. Water Courses. If a tract is traversed by a watercourse, such as a drainage way, channel or stream, there shall be provided a stormwater easement or drainage right-of-way conforming substantially with the lines of the water course, and such further width as will be adequate for the purpose. Streets or parkways parallel to the major water courses may be required. (Ord. 387 '1(part), 1997)

16.20.100 Building sites. A. Size and Shape. The size, width, shape and orientation of building sites shall be appropriate for the location of the land division and for the type of development and use contemplated, and shall be consistent with the residential lot size provisions of Title 17 with the following exceptions:

1. In areas that will not be served by a public sewer, minimum lot and parcel sizes shall permit compliance with the requirements of the Department of Environmental Quality and shall take into consideration problems of sewage disposal, particularly problems of soil structure and water table as related to sewage disposal by septic tank.

2. Where property is zoned and planned for business or industrial use, other widths and area may be permitted at the discretion of the planning commission. Depth and width of properties reserved or laid out for commercial and industrial purposes shall be adequate to provide for off-street service and parking facilities required by the type of use and development contemplated.

B. Access. Except as set forth in Section 16.20.020, each lot and parcel shall abut upon a street other than an alley for a width of at least twenty-five feet. Residential access to an arterial street is prohibited. An encroachment permit is required to obtain access onto a public street. Its issuance shall be based on approved plans. Such plans for entry onto all but local city streets shall take into consideration state access management standards.

C. Through Lots and Parcels. Through lots and parcels shall be avoided except where they are essential to provide separation of residential development from major traffic arteries or adjacent nonresidential activities or to overcome specific disadvantages of topography and orientation. A planting screen easement at least ten feet wide and across which there shall be no right of access may be required along the line of building sites abutting such a traffic artery or other incompatible use.

D. Lot and Parcel Side Line. The line of lots and parcels as far as is practical, shall run at right angles to the street upon which they face, except that on curved streets they shall be radial to the curve. (ORD. 387 '1(part), 1997)

## Chapter 17.08

### DEFINITIONS

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17.08.010 Generally. For the purpose of this title only, the following words, terms and phrases are defined as follows in this chapter and supersede definitions otherwise provided in this code. (Ord. 206 '13(part), 1980)

17.12.080--17.12.120

for any use other than is permitted in the zone in which such buildings, structure or land is located, and there only after proper application for and securing of all permits and licenses required by all applicable state and local laws. (Ord. 206 '2(VII), 1980)

17.12.080 Effective filing date of applications and requests. All applications and requests provided in this title shall be deemed filed upon the submission of all the information, materials, and fees required by this title. (Ord. 206 '2(VIII), 1980)

17.12.090 General exception to lot size requirements. A pre-existing lot which is substandard with respect to area or dimension may be occupied by a use permitted in the applicable zoning district. The use allowed shall be that which comes closest to meeting the requirements of this title. (Ord. 206 '2(X), 1980)

17.12.100 General exception to yard requirements. The following exceptions to the front yard requirement for a dwelling are authorized for a lot in the R district:

A. If there are dwellings on both abutting lots with front yards of less than the required depth for the district, the front yard for the lot need not exceed the average front yard of the abutting dwelling;

B. If there is a dwelling on one abutting lot with a front yard of less than the required depth for the district, the front yard for the lot need not exceed a depth one-half way between the depth of the abutting lot and the required front yard depth. (Ord. 206 '2(XI), 1980)

17.12.110 General exceptions to structure height limitations. The following types of structures or structural parts are not subject to the height limitations of this regulation: chimneys, cupolas, tanks, church spires, belfries, domes, monuments, fire and hose towers, water towers, elevator shafts, and other similar projections. (Ord. 206 '2(XII), 1980)

17.12.120 Access. Every lot shall abut a street, for a width of at least twenty-five feet, except lots that do not abut a street may be approved by the council when the following conditions exist:

A. When the council has approved the creation of an easement for access to a lot;

B. When a parcel of land is on isolated ownership where not more than two lots can be developed, or where access is by easement which was created in advance of the effective date of the ordinance codified in this title. (Ord. 206 '2(XIII), 1980)

C. Additional Height Requirements.

1. Height limits established for the respective districts refer to the height of the building proper. Roof structures for the housing of elevators, stairways, tanks, ventilating fans and similar equipment required to operate and maintain the building, fire or parapet walls, skylights, towers, flagpoles, chimneys, smokestacks, wireless masts, TV antennas, steeples and similar structures may be erected above the height limits prescribed in this chapter, provided that no roof structure, feature or any other device above the prescribed height limit shall be allowed or used for the purpose of providing additional floor space;

2. The maximum height of building permitted conditionally shall be the same as the requirements of the district in which it is located unless otherwise specified.

D. The minimum area requirements of this chapter shall not be construed to govern in situations where greater minimum area requirements are imposed or required by state law, state rules and regulations, or the provisions of this title. (Ord. 358 (part), 1994; Ord. 267 '1(part), 1986; Ord. 206 '7(I), 1980)

17.32.020 Parking requirements. Buildings erected or enlarged or uses established or changed after the effective date of the ordinance codified in this title shall comply with the following parking requirements.

A. Required Parking Spaces.

Use

Parking Spaces Required

1. One- or two-family dwelling/mobile home	Two parking spaces per dwelling unit.
2. Multiple family dwelling	One and one-half spaces per dwelling unit.
3. Retail, commercial establishments	One for every 300 square feet of gross floor area.
4. Business and professional offices	One for every 250 square feet of gross floor area.
5. Medical offices, clinics	5% spaces per doctor or 200 square feet of gross floor area, whichever provides the greatest amount of parking.
6. Institutional uses	One space per two beds.
7. Motels	One space per lodging unit, plus one for every two restaurant seats.
8. Churches, clubs, lodges	One space for every four fixed seats, or every eight feet of bench length or every 35 square feet in the main auditorium or place of worship where no permanent seats or benches are maintained.
9. Restaurants	One space per 200 square feet of floor area, plus one space per employee.

B. Parking Requirements for Uses not Specified. The parking space requirements for buildings and uses not set forth herein shall be determined by the planning commission and such determination shall be based upon the requirements for the most comparable building or use specified herein. The decision of the planning commission may be appealed to the city council in the manner allowed for appeals as specified in Chapter 17.44.

C. Common Facilities for Mixed Uses.

1. In the case of mixed uses, the total requirements for off-street parking spaces shall be the sum of the requirements for the various uses of 5.5 spaces per one thousand feet of gross floor area, whichever provides the greatest amount of parking. Off-street parking facilities for one use shall not be

considered as providing parking facilities for any other use except as provided in paragraph 2 of this subsection;

2. Joint use of parking facilities: the planning commission may authorize the joint use of parking facilities required by said uses and any other parking facility, provided that:
  - a. The applicant shows that there is no substantial conflict in the principal operating hours of the building or use for which the joint use of parking facilities is proposed,
  - b. The parking facility for which joint use is proposed is no further than four hundred feet from the building or use required to have provided parking, and
  - c. The parties concerned in the joint use of off-street parking facilities shall evidence agreement for such joint use by a legal instrument approved by the city attorney as to form and content. Such instrument, when approved as conforming to the provisions of this ordinance, shall be recorded in the office of the city recorder.

D. **Parking Area Design and Improvement Requirement.** All public or private parking areas which contain three or more parking spaces and outdoor vehicle sales areas shall be designed and improved according to the following:

1. Groups of five or more parking spaces, except those in conjunction with single-family dwellings on a single lot, shall be served by a service drive so that no backward movement or other maneuvering of a vehicle within a street, other than an alley, will be required. Service drives shall be designed and constructed to facilitate the flow of traffic, provide maximum safety in traffic access and egress and maximum safety of pedestrians and vehicular traffic on the site. The number of service drives shall be limited to the minimum that will allow the property to accommodate and service anticipated traffic;
2. On parking lots having five or more parking spaces, such spaces shall be clearly marked in a permanent manner;
3. All new parking areas shall have a durable, dust-free surfacing of asphaltic concrete, gravel, Portland cement concrete or other approved materials. All parking areas, except those in conjunction with a residential use shall be graded so as not to drain storm water onto any abutting public or private property;
4. All parking areas, except those required in conjunction with a residential use, shall provide a substantial bumper which will prevent cars from encroachment on abutting private and public property;
5. All parking areas, including service drives in the commercial district except those required in conjunction with a residential use, which abut a residential district, and which require an interior yard setback, shall be enclosed along and immediately adjacent to, any interior property which abuts any residential district, with opaque, sight-obscuring fence, wall or hedge not less than three feet nor more than eight feet in height, but adhering to the visual clearance and front and interior yard requirements established for the commercial district. If the fence, wall or hedge is not located on the property line, said area between the fence, wall or hedge and the property line shall be landscaped with lawn or low-growing evergreen ground cover, or vegetable or rock mulch. All plant vegetation in this area shall be adequately maintained, and said fence, wall or hedge shall be maintained in good condition. Screening or planting shall be of such size as to provide the required degree of screening within twelve months after installation. Adequate provisions shall be maintained to protect walls, fences or plant materials from being damaged by vehicles using said parking area;
6. Any lights provided to illuminate any public or private parking area shall be so arranged as to reflect the light away from any abutting or adjacent residential district.

E. **Parking Table and Diagram.** The following table provides the minimum dimensions of public or private parking areas, based on the diagram where "A" equals the parking angle, "B" equals the

stall width, "C" equals the minimum stall depth, "D" equals the minimum clear aisle width, "E" equals the staff distance at bay side, "F" equals the minimum clear bay width, and "G" is the maximum permitted decrease in clear aisle width for private parking areas.

F. Off-street Loading. Commercial or other non-residential buildings erected or established which abut upon an alley or street shall have one permanently maintained loading space for commercial vehicles of not less than ten feet in width and twenty-two feet in length for each thousand square feet of lot area or fraction thereof upon which the building is located, provided that not more than two such loading spaces shall be required. (Ord. 206 '7(II), 1980)

17.32.030 Vision clearance area. A vision clearance area shall be required on a corner lot at the intersection of two streets or a street and an alley. The vision clearance area is a triangular area determined by two measurements taken along the property line from the point of intersection of the two streets (or street/alley) rights-of-way. In the case of two streets, the distances on either side from the point of intersection shall be twenty-five feet. In the case of a street/alley intersection, the distances shall be ten feet. (Ord. 206 '7(III), 1980)

17.32.040 Sign requirements. All signs erected, re-erected, altered or painted on a building surface within the city shall present no hazards to the public, be competitively fair and be attractive in design. Hereafter, before any sign (temporary or permanent) is placed within the city limits, a sign permit shall be required to be applied for from the city. The proposed sign shall be in conformance with the provisions of this section. See subsection A of this section for what constitutes a sign under this section. Signs are intended to provide identification of the site or building on which they are placed. Signs advertising locations other than the location on which they are placed require approval by the city council.

A. Definitions. Unless the context clearly requires otherwise, the singular shall include the plural and the following 17.32.040 Sign requirements. All signs erected, re-erected, altered or painted on a building surface within the city shall present no hazards to the public, be competitively fair and be attractive in design. Hereafter, before any sign (temporary or permanent) is placed within the city limits, a sign permit shall be required to be applied for from the city. The proposed sign shall be in conformance with the provisions of this section. See subsection A of this section for what constitutes a sign under this section. Signs are intended to provide identification of the site or building on which they are placed. Signs advertising words and phrases shall mean:

"Building line" means a line established by ordinance beyond which no building may extend. A building line may be a property line.

"Major sign" means a sign which requires approval through the variance procedure.

"Marquee" means a permanent roofed structure attached to and supported by the building and projecting over public property or beyond a building line.

"Projection" means the distance by which a sign extends over public property or beyond a building line.

"Sign" means any notice or advertisement, pictorial or otherwise, used as an outdoor display for the purpose of advertising the property or the establishment or enterprise, including goods and services, upon which the sign is exhibited. Sign shall also mean an advertisement for a political candidate or ballot measure. This definition shall not include official notices issued by a court or public body or officer, or directional, warning or information signs, or structures required by or authorized by law, or by federal, state, county or city authority.

"Sign, area of." In determining whether a sign is within the area limitations of this section, the area of the total exterior surface shall be measured and computed in square feet. If the interior angle between the planes.....

17.44.010 Purpose. The purpose of this chapter is to establish the process for implementing the Cave Junction comprehensive plan through the establishment of procedures and criteria for considering proposals for zoning, rezoning, conditional use permits, temporary permits, variances, and amendments to this title. (Ord. 343 (part), 1993: Ord. 206 '10(I), 1980)

17.44.020 Initiation--Application. A. By Planning Commission and City Council. The zoning of unzoned properties, the rezoning of properties, and amendment of this title may be initiated by the planning commission upon its own motion or upon petition of an interested person or persons or be initiated by the city council in the form of a request to the planning commission that it consider the proposed zoning, rezoning, or amendment.

B. By Applicant. Application for the zoning or rezoning of properties and requests for conditional use permits, temporary permits, and variances shall be filed with the city on the form prescribed by the city council by any person with a legal interest in the property at least thirty days prior to the planning commission's public hearing, and shall include the following:

1. Name and address of applicant;
2. Statement of the applicant's legal interest in the property (owner, contract purchaser, lessee, renter, etc.), a description of that interest, and, in case the applicant is not the owner, a notarized letter of authority appointing the applicant as the owner's agent;
3. Address and legal description of the property;
4. Statement explaining the intended request;
5. The fee required to defray the cost of processing the application;
6. Any other materials or information as may be deemed necessary by the applicant to assist in the evaluation of the request.

C. Final Action.

1. In accordance with ORS 227.178, except as provided in subsection B of this section, the city shall take final action upon an application for a permit or zone change, including all appeals to the council as provided by this chapter, within one hundred twenty days after the application is deemed complete;

2. In accordance with ORS 227.178, if an application for a permit or a zone change is incomplete, the city staff, or committee appointed by the council, shall notify the applicant of exactly what information is missing within thirty days of the receipt of the application and shall allow the applicant a reasonable opportunity to submit the missing information;

3. In accordance with ORS 227.178, the one hundred twenty-day period specified in paragraph 1 of this subsection may be extended for a reasonable period of time at the request of the applicant. Paragraph 1 shall not apply to decisions not wholly within the authority and control of the council, nor to an amendment to the comprehensive plan or a land use regulation which has been acknowledged or to the adoption of a new land use regulation that was forwarded to the Director of Department of the Land Conservation and Development under ORS 197.610(I).

D. Limitations on Refiling of Applications. Applications for which a substantially similar application has been denied within the previous year shall be heard by the planning commission only after the commission's separate determination that for a good cause the application may be refiled. (Ord. 343 (part), 1993: Ord. 206 '10(II), 1980)

17.44.030 Planning commission's public hearing and notice requirements. A. Public Hearing Requirements. The planning commission shall hold not less than one public hearing on each proposed zoning, rezoning, conditional use permit, temporary permit, variance and amendment to this title.

B. Notice Requirements.



1. Notice for each proposed zoning, rezoning, and amendment to this title shall be given at least ten days in advance of the planning commission public hearing by publication in a newspaper of general circulation in western Josephine County;

2. In addition to the general notice requirements of paragraph 1 of this subsection, notice for zoning, rezoning, conditional use permits, temporary permits and variances proposed by an applicant shall be given at least ten days in advance of the planning commission public hearing by mail to the applicant, property owner (if not the applicant) and owners of all property within three hundred feet of the exterior boundaries of the contiguous property ownership involved. (Ord. 343 (part), 1993: Ord. 206 '10(iii), 1980) Notice shall also be provided to public agencies providing transportation facilities and services and ODOT for land use applications that require public hearings, subdivision and partition applications, and other applications which affect private access to roads.

17.44.040 Planning commission review and recommendation. A. The planning commission shall review the proposed zoning, rezoning, conditional use permit, temporary permit, variance and amendment to this title and shall receive pertinent evidence and testimony as to why or how the proposed request is consistent with the criteria provided in this section for evaluating requests for zoning, rezoning, conditional use permits, temporary permits, variance and amendments to this title as the case may be. The planning commission shall determine whether the testimony at the hearing supports a showing of adherence to the required criteria and shall recommend to the city council accordingly that the application be granted or denied or that the proposal be adopted or rejected. Recommendation for denial or rejection shall be final unless appealed to the city council within ten days from the date of the planning commission's action.

B. A complete application which is not acted upon by the planning commission within sixty days from receipt of application by the city shall be deemed denied and may be appealed to the city council in the manner as provided for appeals of planning commission negative recommendations. (Ord. 343 (part), 1993: Ord. 206 '10(IV), 1980)

17.44.050 Action by city council. A. Affirmative Planning Commission Recommendation. Upon receipt of an affirmative planning commission recommendation, the city recorder shall schedule a public hearing before the city council, as provided in Section 17.44.060.

B. Negative Planning Commission Recommendation or Decision--Appeal Procedure. In the event of a negative planning commission recommendation or decision, no action shall be taken by the city council unless the matter is appealed to the city council by any interested person or city official. Such appeal shall be filed in written form with the city recorder within ten days of the date of the planning commission action, stating how the planning commission erred in its application of the requirements of this title. (Ord. 343 (part), 1993: Ord. 206 '10(V), 1980)

17.44.060 Public hearing by the city council. A. within forty days of an affirmative planning commission recommendation or the filing of an appeal as provided in this chapter, the city council shall hold a public hearing. Such hearing and action by the city council shall be in accord with the provisions of this chapter for planning commission hearings. Prior to the hearing the city recorder shall forward to the city council a copy of the application, all pertinent data filed with it and the minutes of the planning commission's public hearing of the matter, if applicable.

B. Prior to taking any action which would alter or modify a planning commission recommendation or decision, the city council shall first refer the proposed alteration or modification to the planning commission for a recommendation. Failure of the planning commission to report within forty days after the referral, or such longer period as may be designated by the city council, shall be

deemed to be approval of the proposed alteration or modification. It shall not be necessary for the planning commission to hold a public hearing on the proposed alteration or modification.

C. In reversing a recommendation or decision of the planning commission, the city council shall indicate in writing, the basis for its decision. (Ord. 343 (part), 1993: Ord. 206 '10(VI), 1980)

17.44.070 Moratorium on permits and applications-Zoning clearance, variance, conditional use permit, temporary Permit, partition, subdivision, building code application, etc.. A. After any matter for rezoning, zoning, or amendment to this title affecting particular property has been set for public hearing by the planning commission, no zoning, subdivision, or building code application or request shall be accepted, granted, issued, or approved except as herein provided until the final action has been taken on the matter.

B. After such final action, granting of pending or subsequent applications or requests shall be in accordance with the requirements of the zoning district classification or requirements as amended by the final action.

C. In the event the planning commission or city council modifies the matter as originally set by the planning commission, pending application or requests shall, in addition, meet the requirements of the proposed change or amendment as modified.

D. In the event that final action upon the proposed change or amendment is not taken within one hundred twenty days of the date set for hearing by the planning commission, the provisions of this section shall no longer be applicable.

E. The provisions of this section shall not be applicable to the issuance of building or plumbing permits for normal repairs or corrections, nor shall the provisions apply when the proposed application or request meets both the requirements of the existing zoning district requirement and the proposed change or amendment, or to the approval of a final major subdivision plat. (Ord. 343 (part), 1993: Ord. 206 '10(VII), 1980)

17.44.080 Criteria and requirements for approval of zoning, rezoning, and amendments to this title.

A. Purpose. The zoning and rezoning of land and amendments to this title are the principal means of achieving the goals of the Cave Junction comprehensive plan. Therefore, over a period of time, changes in zoning, as well as changes to this title, will be necessary.

B. Criteria. Zoning, rezoning and amendments to this title shall be approved only when substantive and probative evidence establishing specific findings of fact have been made that said zoning, rezoning and amendments to this title conform to all of the following criteria:

1. The proposed change conforms to, or is not inconsistent with, the Cave Junction comprehensive plan;

2. It has been demonstrated that there is a public need for the change, and that need is best achieved by this proposal;

3. The proposal is consistent with the purpose and intent of the district classification proposed.

4. Amendments to functional plans, acknowledged comprehensive plans, and land use regulations which significantly affect a transportation facility shall assure that allowed land uses are consistent with the identified function, capacity, and performance standards (e.g. level of service, volume to capacity ratio, etc.) of the facility. This shall be accomplished by either:

a. Limiting allowed land uses to be consistent with the planned function, capacity, and performance standards of the transportation facility;

b. Amending the Transportation System Plan to provide transportation facilities adequate to support the proposed land uses consistent with the requirement of the Transportation Planning Rule;

- c. Altering land use designations, densities, or design requirements to reduce demand for automobile travel and meet travel needs through other modes; or,
- d. Amending the TSP to modify the planned function, capacity and performance standards, as needed, to accept greater motor vehicle congestion to promote mixed use, pedestrian friendly development where multimodal travel choices are provided.

A plan or land use regulation amendment significantly affects a transportation facility if it:

- a. Changes the functional classification of an existing or planned transportation facility;
- b. Changes standards implementing a functional classification system;
- c. Allows types or levels of land uses that would result in levels of travel or access which are inconsistent with the functional classification of a transportation facility; or
- d. Would reduce the performance standards of the facility below the minimum acceptable level identified in the Transportation System Plan.

C. Application, Hearing, Notice and Appeal. Procedures for application, hearing, notice and appeal shall be as provided in this chapter for zoning, rezoning, and amendments to this title. (Ord. 343 (part), 1993; Ord. 206 '10(VIII), 1980)

17.44.090 Criteria and requirements for approval of conditional use permits. A. Purpose. Certain types of uses require special consideration prior to their being permitted in a particular district. The reasons for requiring such special consideration include, among others, the size of the area required for the full development of such uses, the nature of the traffic problems incidental to operation of the uses, and the effect such uses have on any adjoining land uses and on the growth and development of the city as a whole. All uses permitted conditionally possess unique and special characteristics making impractical their inclusion as outright uses in many of the various districts herein defined. Locations and operation of designated conditional uses shall be subject to review and authorized only by issuance of a conditional use permit. The purpose of review shall be to determine that the characteristics of any such use shall not be unreasonably incompatible with the type of uses permitted in surrounding areas, and for the further purpose of establishing such conditions as may be reasonable so that the basic purposes of this title shall be served. Nothing herein shall be construed to require the granting of a conditional use permit.

B. Conditional Uses. Where ambiguity exists concerning the appropriate classification or procedure for the establishment of a particular use or type of development, that use or development may be established by a conditional use permit in accordance with the provisions of this section.

C. Criteria. A conditional use permit may be granted only if substantive and probative evidence establishing specific findings of fact have been made that the conditional use conforms to all of the following criteria:

- 1. Conformity with the Cave Junction comprehensive plan;
- 2. Compliance with special conditions established by the planning commission to carry out the purposes of this section.

D. Conditions. Reasonable conditions may be imposed in connection with the conditional use permit as necessary to meet the purposes of this section. Guarantees and evidence may be required that such conditions will be or are being complied with. Such conditions may include the following, requiring:

- 1. Modify yard setbacks, coverage, and height to accomplish specified ends;
- 2. Screen unsightly development such as trash receptacles, mechanical apparatus, storage areas, or windowless walls;
- 3. Require walls, fences, hedges, and screen planting to accomplish specified ends;
- 4. Require planting of ground cover or other surfacing to prevent erosion or reduce dust;

5. Retain trees or other natural features for buffers, windbreaks, wildlife and fisheries habitat, livestock habitat, scenic corridors or recreational use;
6. Require adequate off-street parking and loading-unloading facilities;
7. Modify access provisions for safety reasons;
8. Modify sign requirements to meet specified ends;
9. Require landscaping and lighting plans to accomplish specified ends;
10. Require on-going maintenance of buildings and grounds;
11. Require adequate additional right-of-way and road improvements to promote traffic safety. Dedication of land for streets, sidewalks, bikeways, paths, or accessways shall be required where the existing transportation system will be impacted by or is inadequate to handle the additional burden caused by the proposed use;
12. Require abatement of noise, vibration, and odors;
13. Require time limitation for certain activities;
14. Require a time period within which the proposed use shall be developed;
15. Require a limit on total duration of use;
16. Additional conditions which may be necessary to implement the Cave Junction comprehensive plan, including the Transportation System Plan.

E. Application, Hearing Notice and Appeal. Procedures for application, hearing notice, and appeal shall be as provided in this section for conditional use permits.

F. Compliance with Conditions of Approval. Compliance with conditions imposed in the conditional use permit and adherence to the plot plan submitted as approved are required. Any departure from these conditions of approval and approved plans constitutes a violation of this chapter.

G. Vested Interest in Approved Conditional Use. A valid conditional use permit supersedes conflicting provisions of subsequent rezoning or amendments to this title unless specifically provided otherwise by the provisions of this chapter or the conditions of the approval of the conditional use permits.

H. Revocation.

1. Conditional use permits are automatically revoked without special action if:
  - a. The permit has not been exercised within two years of the date of approval, or
  - b. The use approved by the conditional use permit is discontinued for any reason for one continuous year or more;
2. The city council may revoke any conditional use permit for failure to comply with any prescribed condition of the conditional use approval;
3. A hearing for revocation of a conditional use permit may be requested of the planning commission by the city council when the city council is of the opinion any or all of the bases for revocation as stated in this Section exist. Request for a revocation hearing shall be accomplished by submitting a letter to the planning commission stating the basis for requesting the hearing for the revocation. The planning commission shall then set a hearing for the revocation if they determine a hearing is warranted;
4. The public hearing notification and appeal procedures for revocation hearings by the planning commission and city council shall be the same as those for original conditional use application hearings and appeals provided in this chapter.

I. Limitations of Refiling of Application. Applications for which a substantially similar application has been denied or revoked for cause within the previous year shall be heard by the planning commission after a separate determination that for good cause shown the application may be refiled. (Ord. 343 (part), 1993: Ord. 206 '10(IX), 1980)

17.44.100 Criteria requirements for approval of temporary permits. A. Purpose. The purpose of the temporary permit procedure is to allow on an interim basis:

1. Temporary uses in undeveloped areas of the city not otherwise allowable in the applicable zoning district;
2. Use of existing structures designed and intended for a use not allowable in a zoning district and not otherwise a nonconforming use;
3. Erection of temporary structures for activities necessary for the general welfare of an area, provided such uses and activities are consistent with the intention of this title. A temporary permit cannot be granted which would have the effect of permanently rezoning and granting a special privilege not shared-by other property in the same district.

B. Allowable Temporary Uses, Criteria and Limitations.

1. The following are allowable temporary uses and may be permitted in any zoning district, if substantive and probative evidence establishing specific findings of fact have been made that the temporary permit conforms to the following criteria:

a. A different use for existing structures or structures and premises in combination which are occupied or have been occupied by a nonconforming use, provided it is determined by the city council that the character and nature of the proposed use will be less incompatible to the surrounding vicinity than the existing or previous nonconforming uses,

b. Use of existing structures and premises which are designed and intended for a use which is not allowable in the applicable zoning district and new structures and premises and use thereof necessary for the physical and economic welfare of an area, provided it is determined by the city council that the location, size, design, and operating characteristics of the proposed use and new structure, if applicable:

- i. Will be compatible with and will not adversely affect the livability or appropriate development of abutting properties and the surrounding vicinity,
- ii. Will not be adversely affected by the development of abutting properties and the surrounding vicinity,

c. Open land uses which do not involve structures with a combined value in excess of one thousand dollars, provided it is determined by the city council that the location, size, design, and operating characteristics of the proposed use:

- i. Will be compatible with and will not adversely affect the livability or appropriate development of abutting properties and the surrounding vicinity,
- ii. Will not be adversely affected by the development of abutting properties and the surrounding vicinity;

2. In applying the criteria for allowable temporary uses provided in paragraphs b and c of this subsection, consideration may be given to harmony in scale, bulk, coverage, and density; to the availability of public facilities and utilities; to the harmful effect, if any, upon desirable neighborhood character; to the generation of traffic and the capacity of surrounding streets and roads; and to any other relevant impact of the use;

3. No structural alterations may be made to a nonconforming structure to be utilized by a temporary use which would materially prolong the economic life of the structure;

4. Where new structures and use thereof and new open land uses are permitted, the premises shall be required to be restored to the prior state within three months of the termination of the permit. A performance bond shall be required, if determined necessary by the city council, at the time of approval in sufficient amount to cover the estimated cost of such restoration;

5. Temporary permits for any one permit shall not exceed a period of five years.

C. Conditions. Reasonable conditions may be imposed in connection with the temporary permit as necessary to meet the purposes of this chapter. Guarantees and evidence may be required that

such conditions will be or are being complied with. Such conditions may include, but are not limited to, requiring:

1. Special yards and spaces;
2. Fences and walls;
3. Control of points of vehicular ingress and egress;
4. Special provisions on signs;
5. Landscaping and maintenance thereof;
6. Maintenance of the grounds;
7. Control of noise, vibration, odors, or other similar nuisances;
8. Limitation of time for certain activities;
9. A time period within which the proposed use shall be developed;
10. A limit on total duration of use.

D. Application, Hearing, Notice and Appeal. Procedures for application, hearing, notice and appeal shall be as provided in this chapter for temporary permits.

E. Compliance with Conditions of Approval. Compliance with conditions imposed in the temporary permit and adherence to the plot plans submitted as approved are required. Any departure from these conditions of approval and approved plans constitutes a violation of this chapter.

F. Vested Interest in Approved Temporary Permits. A valid temporary permit supersedes conflicting provisions of subsequent rezoning or amendments to this title unless specifically provided otherwise by the provisions of this chapter or the conditions of the approval of the temporary permit.

G. Revocation.

1. Temporary permits are automatically revoked without special action if:
  - a. The permit has not been exercised within one year of the date of approval,
  - b. The use approved by the temporary permit is discontinued for any reason for one continuous year or more;
2. The city council may revoke any temporary permit for failure to comply with any prescribed condition of the temporary permit approval;
3. A hearing for revocation of a temporary permit may be requested of the planning commission by the city council when the city council is of the opinion any or all of the bases for revocation as stated in this chapter exist. Request for a revocation hearing shall be accomplished by submitting a letter to the planning commission stating the basis for requesting the hearing for the revocation. The planning commission shall then set a hearing for the revocation if they determine a hearing is warranted;
4. The public hearing notification and appeal procedures for revocation hearings by the planning commission and city council shall be the same as those for original temporary permit application, hearings, and appeals provided in this chapter.

H. Limitations or Refiling of Application. Applications for which a substantially similar application has been denied or revoked within the previous year shall be heard by the planning commission only after the city council's separate determination that for a good cause the application may be refiled. (Ord. 343 (part), 1993; Ord. 206 '10(X), 1980)

17.44.110 Criteria requirement for approval of variances. A. Purpose. The purpose of a variance is to provide relief when a strict application of the zoning requirements imposes unusual practical difficulties, or unnecessary physical hardships may result from the size, shape or dimensions of a site or the location of existing structures thereon; from geographic, topographic, or other physical conditions on the site or in the immediate vicinity or from population densities, street location or traffic conditions in the immediate vicinity. The power to grant variances does not extend to use regulations. In other words,

no variance can be granted which would have the effect of rezoning-and granting a special privilege not shared by other property in the same district.

B. Criteria.

1. Variances to a requirement of this title with respect to lot area and dimensions, setbacks, yard area, lot coverage, height of structures, vision clearance, fences and walls, and other quantitative requirements may be granted only if substantive and probative evidence establishing specific findings of fact have been made that said variance conforms to the following criteria:

a. That a strict or literal interpretation and enforcement of the specified requirement would result in practical difficulty or unnecessary hardship and would be inconsistent with the objectives of this title;

b. That there are exceptional or extraordinary circumstances or conditions applicable to the property involved or to the intended use of the property which do not apply generally to other properties in the same zoning district;

c. That strict or literal interpretation and enforcement of the specified regulation would deprive the applicant of privileges legally enjoyed by the owners of other properties classified in the same zoning district;

d. That the granting of the variance will not be detrimental to the public health, safety, or welfare or materially injurious to properties or improvements in the near vicinity. Variances in accordance with this section should not ordinarily be granted if the special circumstances upon which the applicant relies are a result of the actions of the applicant or owner or previous owner.

2. Variances to requirements of this title with respect to off-street parking and loading facilities may be authorized as applied for or as modified, if, on the basis of the application, investigation, and the evidence submitted, the following express written findings, in addition to those prescribed in the criteria above, are made:

a. That neither present nor anticipated future traffic volumes generated by the use of the site or use of sites in the vicinity reasonably require strict or literal interpretation and enforcement of the requirements of this title;

b. That the granting of the variance will not result in the parking or loading of vehicles on public streets in such a manner as to materially interfere with the free flow of traffic on the streets;

c. That the granting of the variance will not create a safety hazard or any other condition inconsistent with the general purpose of this title.

3. Variances to requirements of this title with respect to access management may be authorized as applied for or as modified, if, on the basis of the application, investigation, and the evidence submitted, the following express written findings, in addition to those prescribed in the criteria above, are made:

a. The granting of the variation shall be in harmony with the purpose and intent of these regulations and shall not be considered until every feasible option for meeting access standards is explored.

b. Applicants for a variance from these standards must provide proof of unique or special conditions that make strict application of the provisions impractical. Applicants shall include proof that:

i. Indirect or restricted access cannot be obtained;

ii. No engineering or construction solutions can be applied to mitigate the condition; and

iii. No alternative access is available from a street with a lower functional classification than the primary roadway.

C. Effect of Substantially Identical Variances and modification to other City Ordinances.

1. A variance granted by authority of this section eliminates the necessity of obtaining approval of a substantially identical or less extensive variance or modification to the building code and

subdivision ordinance, respectively, and constitutes a variance or modification of those ordinances as applicable;

2. A variance shall not be required to the area, width, depth, frontage, or setback requirements of this title for any subdivision area developed as a unit and receiving final approval in accordance with the provisions of the subdivision ordinance when the requirements to be varied are specifically incorporated within the finally approved subdivision plat.

D. Conditions. Reasonable conditions may be imposed in connection with a variance as deemed necessary to protect the best interests of the surrounding property or neighborhood and otherwise secure the purpose and requirements of this chapter. Guarantees and evidence may be required that such conditions will be and are being complied with.

E. Application, Hearing, Notice and Appeals. Procedures for application, hearing, notice, and appeal shall be provided in this section for variances.

F. Compliance with Conditions of Approval. Compliance with conditions imposed in the variance and adherence to the submitted plans as approved is required. Any departure from these conditions of approval and approved plans constitutes a violation of this chapter.

G. Vested Interest in Approved Variances. A valid variance supersedes conflicting provisions of subsequent rezonings or amendments to this title unless specifically provided otherwise by the provisions of this chapter or the conditions of approval to the variance.

H. Revocation. Variances shall automatically be revoked if not exercised within one year of the date of approval. Further, variances may be revoked if the city council determines:

1. There is probable cause to conclude that the conditions of the variance have not been met;
2. The city council serves notice upon the owner of record of the property by certified mail, return receipt requested, that he is directed to appear and show cause why the variance should not be revoked;
3. The notice provides a time, place and date of the hearing;
4. The hearing is in fact conducted, and the city council finds preponderance of the evidence that the conditions of the variance have in fact been violated.

I. Limitations on Refiling of Application. Application for which a substantially similar application has been denied within a previous year shall be heard by the planning commission after the city council's separate determination that for good cause the application may be refiled. (Ord. 343 (part), 1993: Ord. 206 '10(XI), 1980)



# **APPENDIX E: STREET DESIGN STANDARDS**

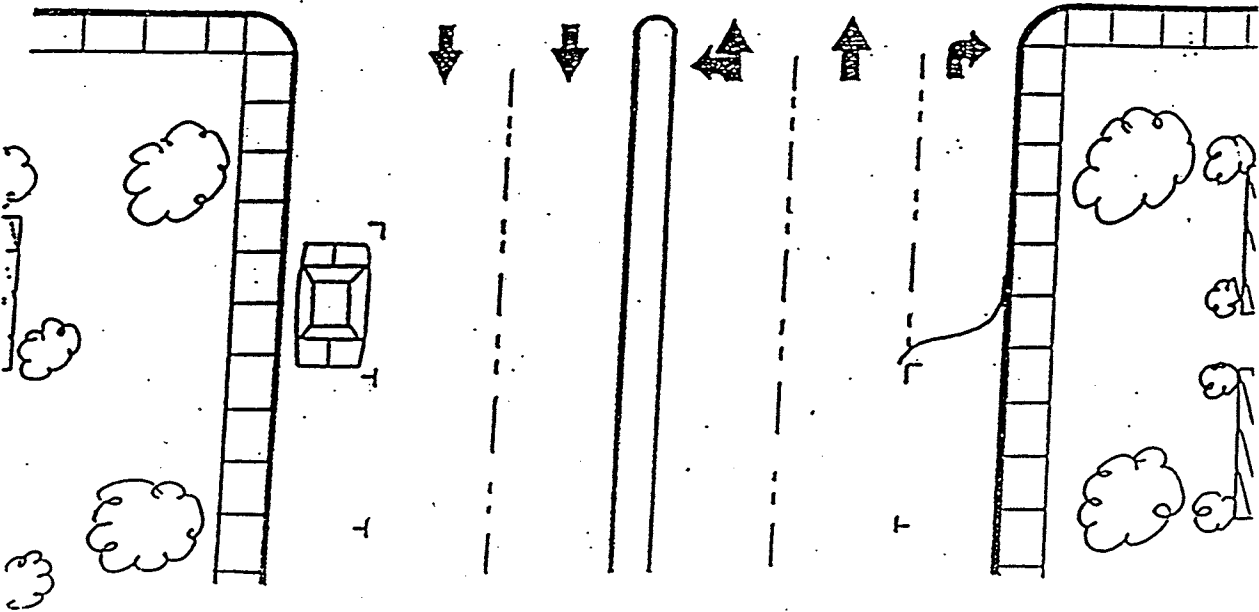
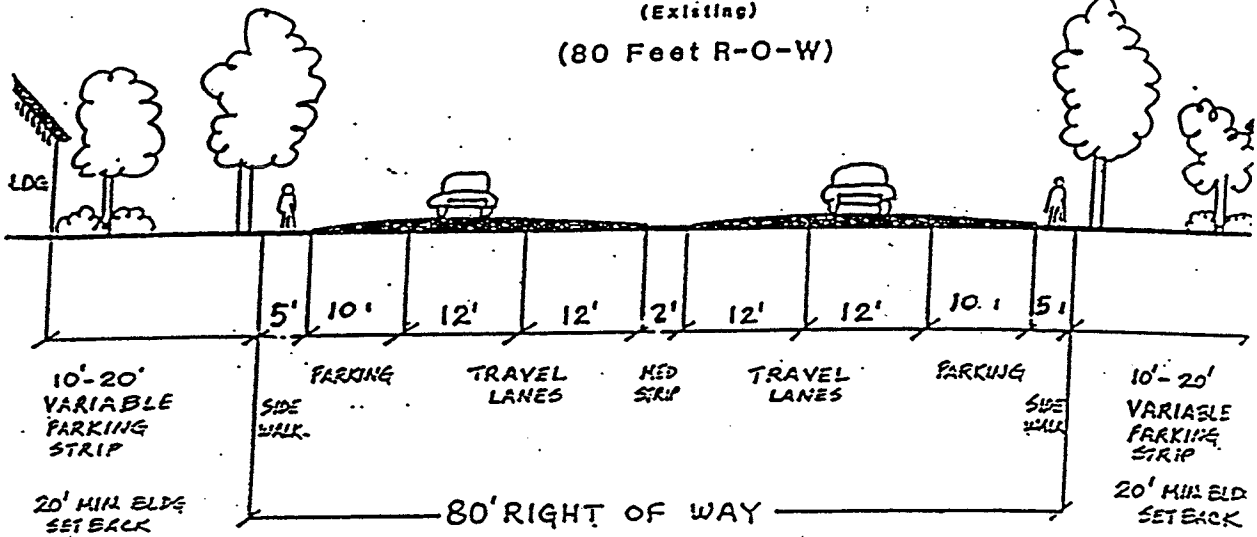
# MAJOR ARTERIAL

CLASS 1

REDWOOD HIGHWAY

(Existing)

(80 Feet R-O-W)

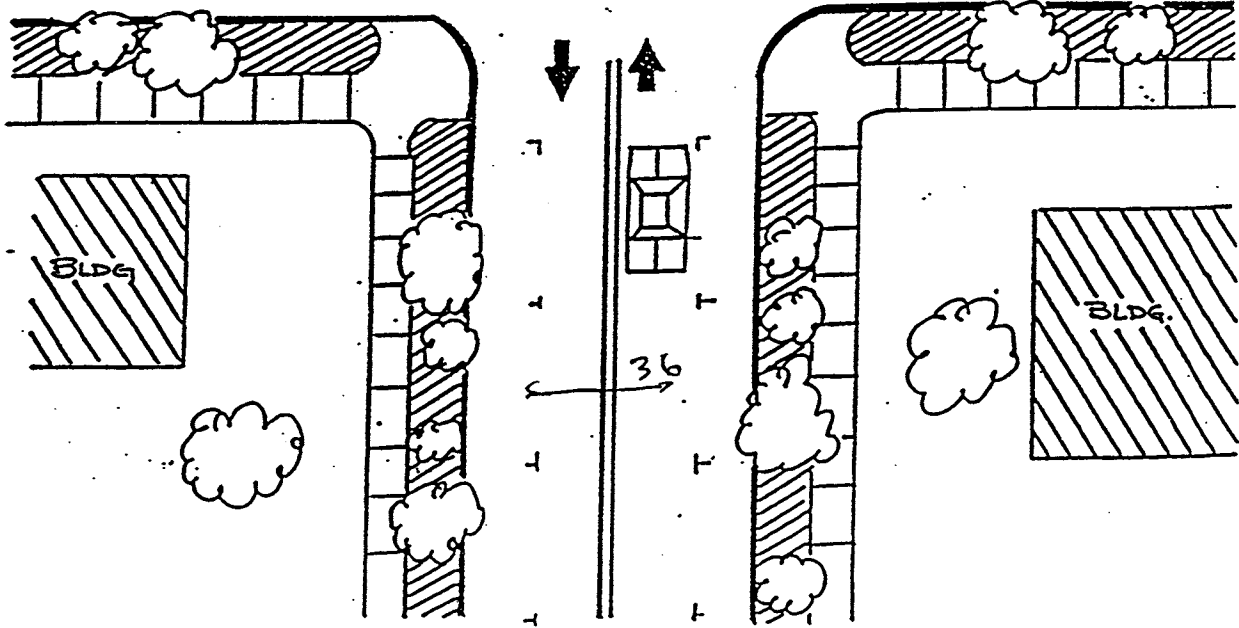
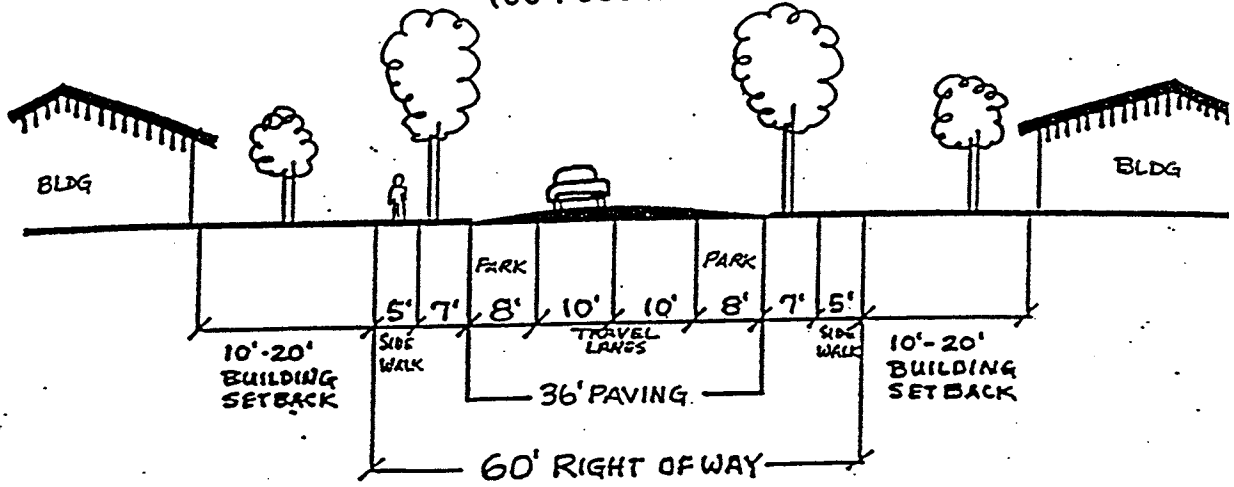


# LOCAL STREETS

## CLASS 5

Parking 2 Sides

(60 Feet R-O-W)



# CUL-DE-SAC

## DRAWING VII-1

Curb Parking

(50 Feet Radius R-O-W)

