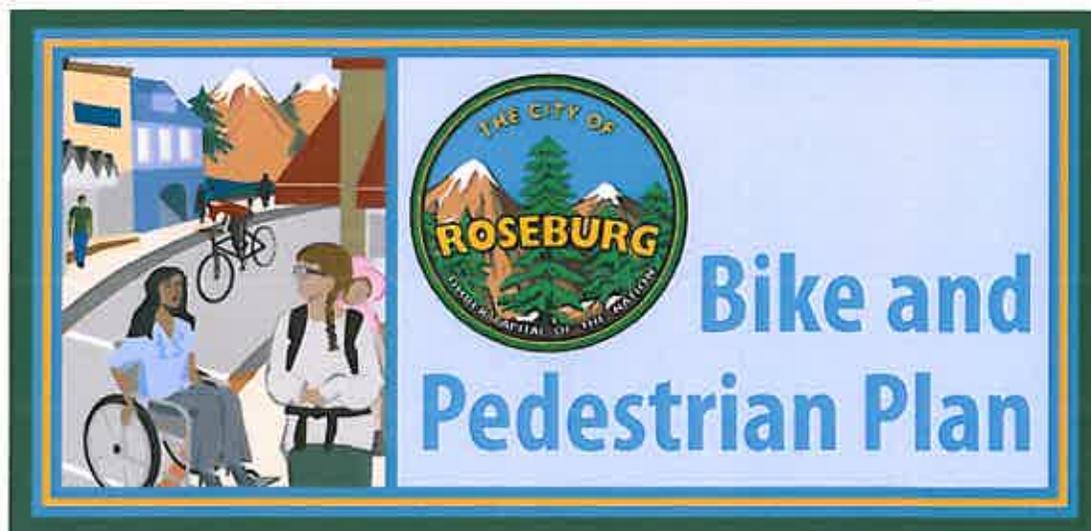


Final Plan – Transportation System Plan Chapters



Prepared for
City of Roseburg
900 SE Douglas Avenue
Roseburg, OR 97470

CITATION

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Plan – TSP Chapters

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Transportation System Plan Chapter 3 – Additional Text

Characteristics Bicycle and Pedestrian Travel

This section presents a discussion of the nature of bicycle and pedestrian travel demand, including types of trips and general types of facilities that can be provided to meet varying trip needs. Trips on foot or by bicycle may of course be for multiple purposes.

Pedestrians

Pedestrians are people who use the most basic public facilities—sidewalks, streets, and other walkways—to travel, and their activities have special characteristics that must be considered in planning. They are a highly diverse group, including joggers, commuters, groups enjoying a leisurely stroll, or people delivering parcels. Pedestrians in the Roseburg area can be classified based on trip types:

- Utilitarian trips – to pedestrian attractors (typically within a mile) such as shopping and errands
- Recreational trips – for aesthetic enjoyment
- Health and athletic training – such as jogging
- Access to transit – generally trips under 0.50 mile to bus stops or park-and-ride lots
- Commute trips – travel to work or school

Because of the variety of pedestrian trip types, pedestrian facilities serve a variety of needs. A commuter or shopper may prefer short and direct routes to their destinations, while a recreational pedestrian may be more concerned about the aesthetics of the surroundings. People will generally not walk more than 1 mile to nearby destinations such as restaurants and shopping areas. Typically, pedestrians prefer routes that are clearly delineated. Pedestrian facilities should also consider persons with disabilities. The ADA mandates that reasonable accommodation for access should be afforded those who may need such accommodation. Everyone is a pedestrian, but too often the needs of pedestrians are overlooked in the planning, design and development of our communities.

“Walkability” is a more qualitative measure of the pedestrian environment, and refers to the quality of walking conditions, including safety, comfort, and convenience. Walkability is essential in pedestrian areas and facilities, and areas with multiple pedestrian trip generators or destinations (see Table 3-1). Factors affecting walkability include proximity of uses, the presence of buffers from traffic, and sidewalks wide enough to share comfortably with multiple users. Walkability is a key component of an efficient transportation system, especially in cities. Walking remains the most inexpensive form of transportation for all people, and constructing walkable communities provides the most affordable transportation system any community can plan, design, construct and maintain. According to the 2000 U.S. Census Bureau *Journey to Work Survey*, in Roseburg, 4.5 percent of residents walk or bike to work, while for Douglas County as a whole, it was 3.6 percent.

Bicyclists

Bicyclists, like pedestrians, can also be categorized based on trip types:

- Utilitarian trips – to/from a bicycle attractor (generally within 5 miles) such as shopping or running errands
- Recreational trips – for aesthetic enjoyment, sightseeing and touring
- Health and athletic training – individual specific physical work-outs

- Access to transit – where bicycle storage facilities are available at the transit stop or park-and-ride lots or where space is available on bus-mounted bicycle racks
- Commute trips – to school or work.

For utilitarian and commuter purposes, the cyclist is most likely to place a significant amount of importance on the directness and grade of route, because they directly affect the energy requirements and comfort for making a trip by bicycle. Since commute trips typically coincide with peak traffic volumes and congestion, increasing potential conflicts with vehicles, routes that minimize potential conflicts points (such as intersections and driveways) may be preferred even though higher speeds and volumes are present. Rather than be directed to side streets, most utilitarian/commute cyclists would prefer to be given bike lanes, wider curb lanes, or stencils on direct routes, which are often arterial streets providing they are safe.

Recreational bicyclists include people of all ages, each with their own abilities, interests, and needs which are often different from the needs of other trip types. Aesthetic surroundings, adjacent vehicle speeds and the number of driveways on arterial streets and safety are important factors that recreational bicyclists take into consideration when selecting a route. For recreational riders who ride with their families, separation from motor vehicle traffic is an important factor. The directness of a bicycle route is typically less important for recreational bicyclists than routes with fewer traffic conflicts.

Bicycle and Pedestrian Destination and Route Choices

It is critically important when planning a bikeway and pedestrian network and supporting facilities to serve all trip types.

Table 3-1 presents a summary of bicycle and pedestrian trip attractors located in the Roseburg area. These include destinations that could attract commuter, utilitarian, transit access and/or recreational trips. The locations of these attractors are also indicated on project maps. Retail, shopping, and restaurant locations are primarily located along arterials and downtown Roseburg also includes a variety of attractors for tourists and residents.

Table 3-1. Bicycle and Pedestrian Trip Attractors in the Roseburg Area

Summary of Types of Trip Attractors
Schools, Community College and Training Centers
Library
Parks, open spaces, and recreational facilities
Shopping areas and retail centers
Employment centers
Public facilities and community centers
Cultural, historical and tourist destinations
City Hall, Court House, and other government offices
Transit connections

When options are available, pedestrians and cyclists generally choose a route that provides the best balance of the following desirable characteristics:

- Directness between the origin and destination points
- Minimal gradients to be negotiated
- A high quality and well-maintained surface

- Lower volumes of motor vehicle traffic
- Adequate space for allowing faster traffic to safely pass
- Pleasant environmental surroundings
- Personal safety and security
- Minimal number of stops or delays.

Objectives of Bicycle and Pedestrian System

The bicycle and pedestrian system should be developed to further the following objectives:

- **Improve and enhance mobility.** Provide a balanced transportation system that expands local transportation choices that are convenient and affordable options for meeting the travel needs of the community.
- **Support land use and transportation patterns.** Provide for the expansion and enhancement of the transportation system to create a bike and pedestrian network that complements existing land use and circulation patterns. Identify reasonable and feasible bicycle and pedestrian transportation routes including Americans with Disabilities Act (ADA) accessibility.
- **Identify and prioritize needs.** Identify existing bicycle and pedestrian network needs and recommend projects that will further enhance and improve conditions in Roseburg for all types of users. Provide a framework for a bicycle and pedestrian network that is consistent with and complementary to federal, state, and local plans and policies.
- **Provide needed facilities and services.** Through the use of public forums, facility tours, local data on biking and walking, and best engineering practices, identify the facilities and services that are needed to improve bicycle and pedestrian travel in Roseburg. Promote increased utility and connectivity of bicycle, pedestrian, and transit routes.
- **Integrate Land Use and Transportation.** For areas with little development and areas preparing for significant redevelopment, integrate transportation and land use to produce optimal designs which makes for efficient, effective, and bike and pedestrian friendly development.
- **Enhance and preserve the livability of Roseburg.** Develop and maintain aesthetically pleasing bicycle and pedestrian facilities. Provide people-friendly streets, paths, trails, and activity centers available to everyone. Support sustainable community development. Bicycling and walking can reduce traffic congestion vehicle miles traveled, and noise. It encourages social interaction, thus promoting a feeling of community.
- **Improve community and environmental health.** Develop pedestrian and bicycle friendly infrastructure linking desired destinations, encourage more active forms of travel and healthier lifestyle choices for residents. Provide increased opportunity for positive interactions with other community members and the natural environment through walking and bicycling. As travel modes, walking and bicycling can also improve the health of the environment by reducing vehicle exhaust emissions and energy consumption.
- **Improve safety.** Increase safety, including personal safety, for bicyclists and pedestrians in Roseburg through recommendations in design practices and guidelines, proposed projects, and suggested measures of public education and enforcement.
- **Prioritize capital improvements.** Provide Roseburg with a prioritized list of bicycle and pedestrian capital improvements to coordinate with TSP and Comprehensive Plan policies. Generate recommended improvements that reflect public comments gathered at meetings,

through outreach efforts, and technical findings of background data such as reported motor vehicle, bicycle, and pedestrian collisions or other accidents.

- **Identify funding strategies for implementation.** While the full and optimal implementation of the bicycle and pedestrian elements of the TSP, is important to realize over time, the cost of improvements will likely exceed the available funding. For improvement projects, as well as education and other programs, funds will have to be leveraged, new sources identified, and existing transportation funds re-evaluated.

Bicycle and Pedestrian Facilities

The 1995 Oregon Bicycle and Pedestrian Plan set forth the standards and guidelines for bikeways, walkways, and other pedestrian facilities. Many of the standards and guidelines described below are based on federal standards and guidelines and are typical of what is found in the Roseburg urban area.

On-Road Bikeways¹

Bicycles are legally classified as vehicles in Oregon, and roadways must be designed to allow bicyclists to ride in a manner consistent with the vehicle code. A bikeway is created when a road has the appropriate design treatment to accommodate bicyclists, based on motor vehicle traffic volumes and speed. The basic design treatments to accommodate bicycle travel on the road are: shared roadway, shoulder roadway, or bike lane. Another type of facility is separated from the roadway: multi-use path.

There are no specific bicycle standards for most shared roadways; they are simply the roads as constructed. Shared roadways function well on local streets and collectors, and on low-volume rural roads and highways. Shared roadways are suitable in urban areas on streets with low speeds—25 mph or less—or low traffic volumes (3,000 Average Daily Traffic or less, depending on speed and land use). A wide curb lane may be provided where there is inadequate width to provide a bike lane. Bike lanes are mandated on new or reconstructed urban arterial and major collector streets. Bike lanes on rural roadways near urban areas, where there is high potential bicycle use, are permitted but not required.

Walkways²

Pedestrian facilities include walkways, traffic signals, crosswalks, refuge islands, and other amenities such as illumination and benches.

A walkway is a transportation facility built for use by pedestrians and persons in wheelchairs.

Walkways include:

- Sidewalks
- Paths

¹ Oregon Bicycle and Pedestrian Plan (1995), II.1. On-Road Bikeways

² Oregon Bicycle and Pedestrian Plan (1995), II.4 Walkways, B. Standards

Sidewalks

Sidewalks are located along roadways, separated with a curb and/or planting strip, and have a hard, smooth surface. You may want to edit or reduce what I added here (straight out of ORS) Bicyclists, particularly young children, sometimes use sidewalks in residential areas, but generally bicycle riding on sidewalks conflicts with pedestrian use and is subject to Oregon Revised Statute **814.410 which states:**

- (1) A person commits the offense of unsafe operation of a bicycle on a sidewalk if the person does any of the following:
 - (a) Operates the bicycle so as to suddenly leave a curb or other place of safety and move into the path of a vehicle that is so close as to constitute an immediate hazard.
 - (b) Operates a bicycle upon a sidewalk and does not give an audible warning before overtaking and passing a pedestrian and does not yield the right-of-way to all pedestrians on the sidewalk.
 - (c) Operates a bicycle on a sidewalk in a careless manner that endangers or would be likely to endanger any person or property.
 - (d) Operates the bicycle at a speed greater than an ordinary walk when approaching or entering a crosswalk, approaching or crossing a driveway or crossing a curb cut or pedestrian ramp and a motor vehicle is approaching the crosswalk, driveway, curb cut or pedestrian ramp. This paragraph does not require reduced speeds for bicycles at places on sidewalks or other pedestrian ways other than places where the path for pedestrians or bicycle traffic approaches or crosses that for motor vehicle traffic.
 - (e) Operates an electric assisted bicycle on a sidewalk.
- (2) Except as otherwise specifically provided by law, a bicyclist on a sidewalk or in a crosswalk has the same rights and duties as a pedestrian on a sidewalk or in a crosswalk.
- (3) The offense described in this section, unsafe operation of a bicycle on a sidewalk, is a Class D traffic violation. [1983 c.338 §699; 1985 c.16 §337; 1997 c.400 §7; 2005 c.316 §2]

The City of Roseburg Ordinance 8.02.140, prohibits bicyclists from operating a bicycle on a sidewalk: 1) in a manner dangerous to persons or property; or 2) that is within the Downtown Development District.

Paths

Paths are typically used by pedestrians, cyclists, skaters, and joggers. It is not realistic to plan and design a path for the exclusive use by pedestrians, as other users will be attracted to the facility. Paths may be unpaved, constructed with packed gravel or asphalt grindings, if they are smooth and firm enough to meet ADA requirements.

- **Multi-Use Paths** – Well-planned and well-designed multi-use paths can provide good pedestrian and bicycle mobility. Paths can serve both commuter and recreational cyclists and pedestrians. The key components to successful paths include: continuous separation from traffic, scenic

qualities, connection to land uses, well-designed street crossings, visibility, good design, and proper maintenance.³

- **Unpaved Paths** – The standard width of an unpaved path is the same for sidewalks. An unpaved path should not be constructed where a sidewalk is more appropriate. The surface material should be packed hard enough to be usable by wheelchairs and children on bicycles (the roadway should be designed to accommodate more experienced bicyclists).

³ Oregon Bicycle and Pedestrian Plan (1995), II.6. Multi-Use Paths

Transportation System Plan Chapter 4 – Additional Text

BARRIERS TO PEDESTRIAN AND BICYCLE TRAVEL

To increase the share of biking and walking trips, bicycle and pedestrian infrastructure is needed to form safe connections between destinations. According to national surveys, Americans say they would walk or ride a bicycle to work, or to run errands, if it was safe and convenient to do so.⁴

Pedestrian and bicycling barriers and intersections include a wide variety of physical features that make it difficult or less safe for pedestrians and bicyclists to travel. These barriers are described below.

Pedestrian Barriers

- Absence or gaps in sidewalk system,
- Non-ADA compliant ramps or sidewalk widths
- Utility poles, signal control boxes, signs, and trees in sidewalks
- Poor maintenance of facilities
- Lack of designated crossings opportunities
- Intersection crossing distances
- Lack of lighting and security along routes
- Frequent driveway crossings
- Discourteous or inattentive drivers
- Lack of enforcement of traffic laws, which can disadvantage pedestrians
- Safety or perceived safety threats from motor vehicles as well as threats to personal safety
- Railroad crossings
- Uncomfortable walking environment that could result from requiring pedestrians to walk immediately adjacent to high-volume and/or high-speed traffic on curb-tight, narrow sidewalks.
- Weather

Bicycling Barriers

- Poor maintenance of facilities including street and path sweeping and repair of surface defects
- High volumes of motor vehicle traffic
- Inadequate space for traffic and bicycles to safely co-exist
- Lack of places to safely store bicycles at destinations
- Frequent driveway crossings
- Discourteous or inattentive drivers
- Storm sewer gratings not at-grade running parallel to the direction of travel/utility covers not at grade
- Lack of lighting and security along routes

⁴ US Department of Transportation, Federal Highway Administration, *National Bicycling and Walking Study*. FHWA-PD-97-023

- Railroad crossings.
- Intersections
- Weather
- Lack of enforcement of traffic laws

Intersections pose barriers to both bicycles and pedestrians including:

- Free-turning vehicle movements
- Insufficient lighting
- Wide crossing distances
- Unimproved or poorly designed railroad crossings
- Absence of bicycle and pedestrian signal call devices
- Obscured sight distance
- Traffic speed at interchanges
- Inattentive drivers
- Left turns on multi-lane heavily travelled streets
- Intersections lacking sufficient roadway markings, signage, and design so all users understand and heed crossings.

Continuity of facilities and connections to desired destinations is essential to encourage both bicycle and pedestrian travel. Especially important is connecting people to other modes of transportation such as transit. Improving access to multimodal travel is an important element in facilitating regional travel. The use of two or more modes of transportation in a single trip (i.e., bicycling and riding the bus) can extend the distance that someone is able to travel, thus reducing another barrier to pedestrians and bicyclists: destinations that are out of reach.

Crash Data

Crash analyses for both bicyclists and pedestrians were undertaken in order to prioritize specific improvements based on the incidence of crashes at specific locations. The analyses also reveal where the greatest opportunities for safety improvements may be found in the city.

Data for reported crashes involving bicycles were obtained from the Roseburg Police Department for the period 2000 to 2005. Over 100 bicycle and pedestrian related crashes were reported in the 6-year period, including one pedestrian fatality.

The bicycle and pedestrian crashes were concentrated along the following streets:

- Harvard Avenue
- Stephens Street
- Douglas Avenue
- Stewart Parkway
- Garden Valley Boulevard

The higher number of crashes on these streets may simply be an indication of high volumes of traffic on the street. These arterials provide for cross town connections and include many of the destinations that attract residents.

More detailed crash data was obtained from ODOT Crash Analysis and Reporting Unit. An analysis of the crashes was performed in an attempt to gain a greater understanding of some of the safety and mobility issues. The data indicates that intersections and driveways are key

conflict points for both bicyclists and pedestrians. ‘Right hook’ maneuvers or the failure of motorists to yield to bicyclists and pedestrian at intersections was common in the crash data. Bicyclist and pedestrians not following the rules of the road by crossing streets at non-designated locations and riding the wrong way in the bike lanes contributed to some of the reported crashes.

Bicycle and Pedestrian Network

The City of Roseburg has gone through a number of planning efforts that either directly or indirectly addresses bicycle and pedestrian needs within the city. Those efforts include the 2006 Transportation System Plan (TSP), the Parks Master Plan, Waterfront Concept Plan, and the Bicycle and Pedestrian Plan process. Maps illustrating the existing, planned improvements, and network needs are found in Figures 4-1 and 4-2.

Critical Connection-Route Selection Criteria

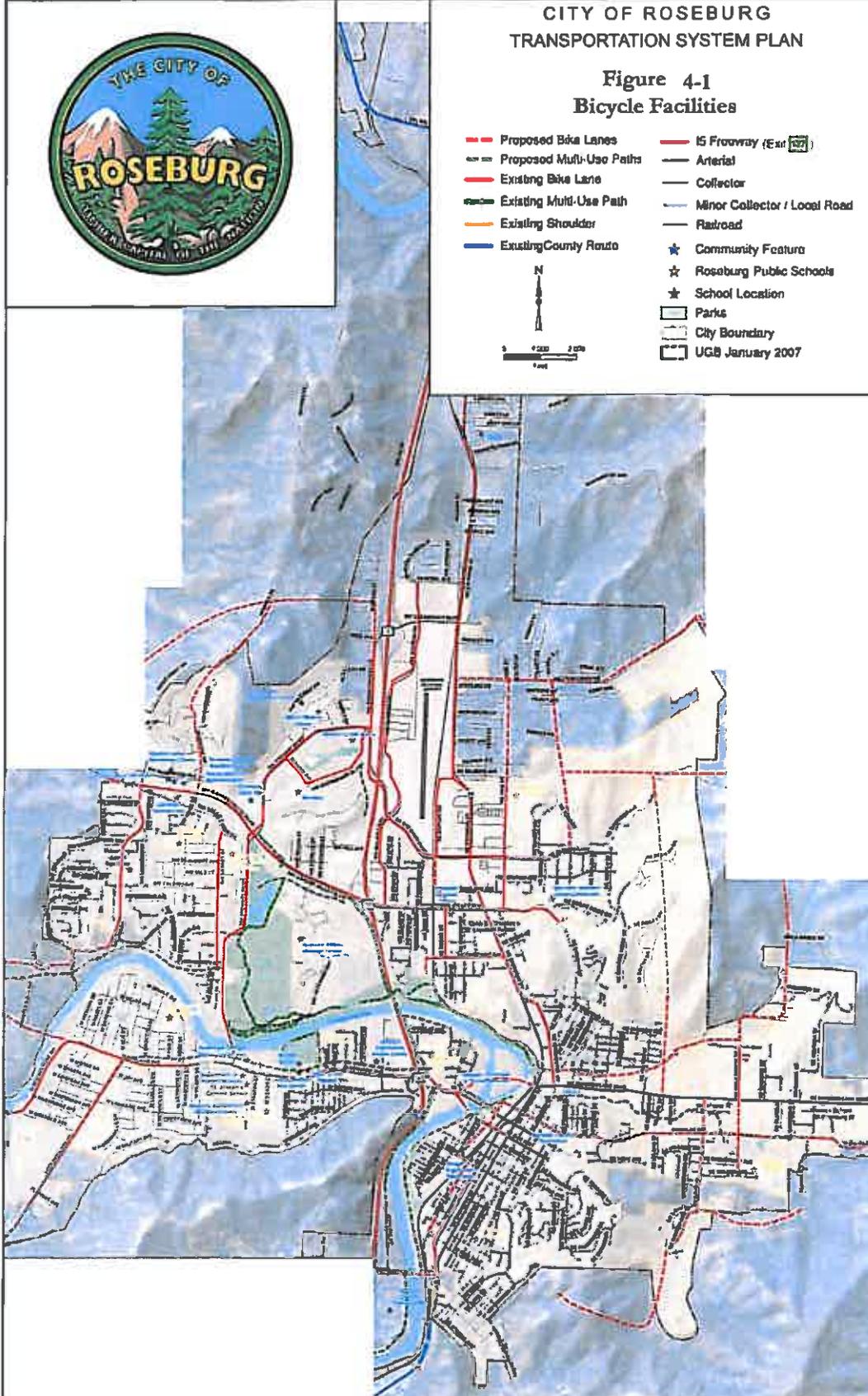
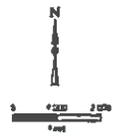
The identification of critical routes is an important step in focusing the further efforts to prioritizing investment projects for improving or creating new bicycle and pedestrian facilities, and promoting a positive walking and bicycling environment. To reach this point is a two-step process. The first step is to determine critical connections—what destinations should/could be connected. The second step is to determine what routes best achieve these desired connections. Criterion was developed to assist with the process of identifying and refining critical routes for further evaluation, as shown in Table 4-1. The criteria can be applied to existing facilities or to identify new routes in the bicycle and pedestrian network.



CITY OF ROSEBURG
TRANSPORTATION SYSTEM PLAN

Figure 4-1
Bicycle Facilities

- Proposed Bike Lanes
- - - Proposed Multi-Use Paths
- Existing Bike Lane
- - - Existing Multi-Use Path
- Existing Shoulder
- Existing County Route
- I5 Freeway (Exit 127)
- Arterial
- Collector
- Minor Collector / Local Road
- Railroad
- ★ Community Feature
- ★ Roseburg Public Schools
- ★ School Location
- ▭ Parks
- ▭ City Boundary
- ▭ UGB January 2007



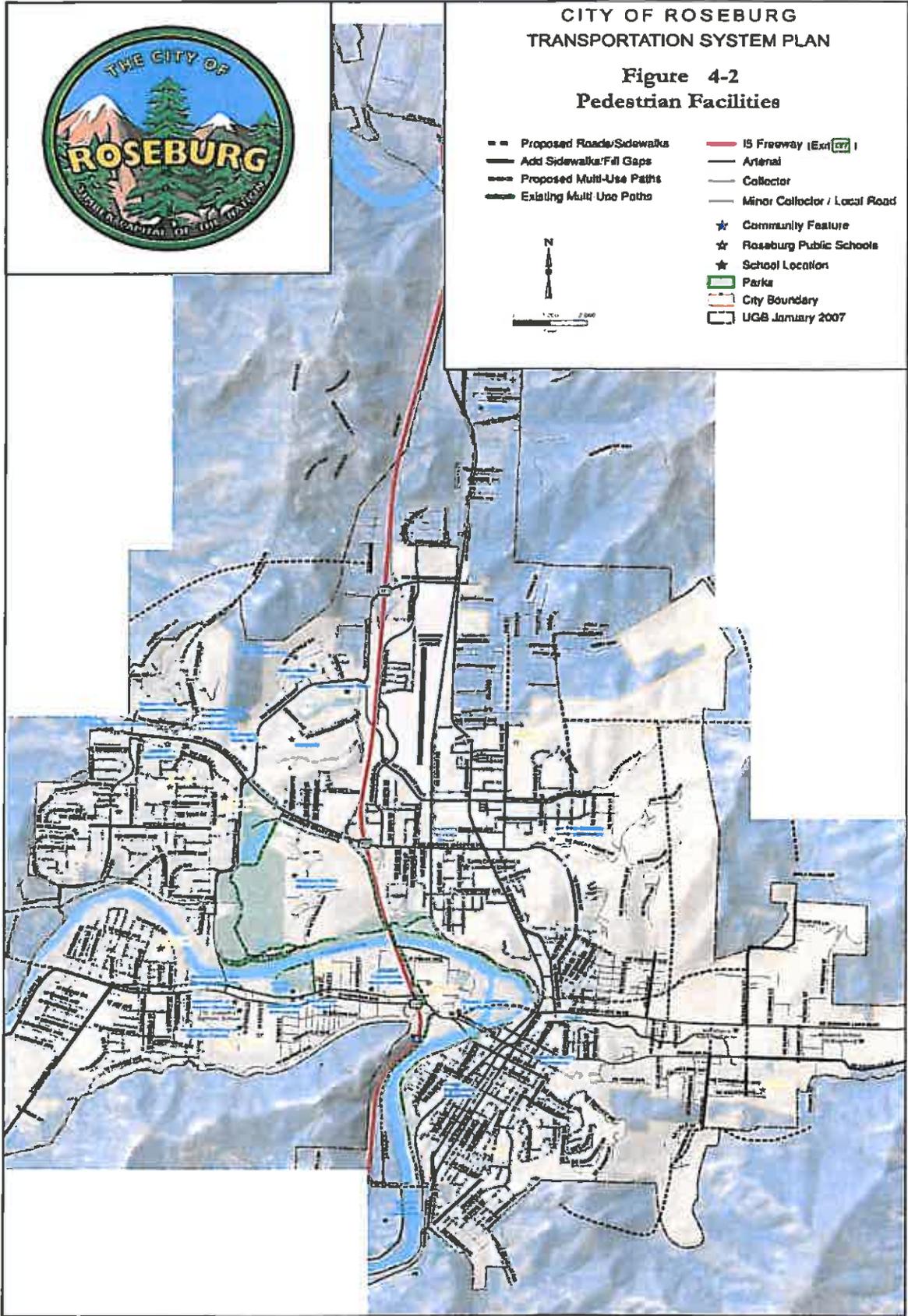


Table 4-1 Critical Route Criteria

<p>Connectivity</p> <p>Is the route essential for circulation in the bicycle and/or pedestrian system? Does the route lead to a destination likely to be sought? Does the route fill a missing gap in the bicycle and/or pedestrian system? Does the project offer potential benefits to the wider, regional community by offering opportunities for increased connectivity to destinations and bicycle/pedestrian facilities outside Roseburg UGB?</p>
<p>System Users</p> <p>Does the route serve the needs of existing system users? Would the route attract new users or increase usage based on population, aesthetics, etc.? Does the route connect or potentially connect to transit? Does the route support or conflict existing or proposed land use and economic development plans? If the route conflicts with land use and economic development plan is still valuable or necessary to pursue?</p>
<p>Safety and Comfort</p> <p>Does the route improve or address bicycling and walking conflicts at locations with documented or perceived safety issues? Does the route improve or address issues related to personal safety from assault or threats?</p>
<p>Address Travel Barriers</p> <p>Does the route overcome or address a barrier in the current bicycle and pedestrian network such as topography?</p>
<p>Livability</p> <p>Does the route positively impact public and community health by creating people-friendly facilities enticing to all users? Does the route support sustainable community development?</p>
<p>Feasibility and Alternatives</p> <p>Is it feasible and reasonable to build the route? Are there other effective alternative routes to consider?</p>

Selected Critical Routes

Critical routes were initially identified through an evaluation of important destinations to be connected, and which corridors best achieve the desired connections. The list of critical routes were then evaluated and prioritized based on the criteria of connectivity, system users, safety and comfort, addressing travel barriers, livability and feasibility and alternatives.

Additional data was collected for the critical routes including: traffic, geometric conditions, safety conditions, and other factors influencing the existing transportation conditions. This information was used to further evaluate route needs and deficiencies. Critical route corridor deficiencies and opportunities not specifically related to traffic operations or safety were also assessed against the evaluation criteria as outlined. Considerable public comment, and input from the Ad Hoc Committee (AHC) and Project Management Team (PMT) throughout the process help review and refine the final list of critical routes to the ten presented in Table 4-2 and illustrated in Figures 4-3, 4-4, and 4-5.

Table 4-2. Priority Critical Route List

Critical Route	Route Limits
NW Calkins Avenue	Troost Street to NW Keasey Street
W Harvard Avenue	I-5 to Lookinglass Road
NW Garden Valley Boulevard	I-5 to Highland Street
NW Highland Street/NW Fairmount Street	Stewart Parkway to Gaddis Park
Washington/Oak Bridges	Washington and Oak Avenue
NE Douglas Avenue	Spruce Street to Hwy 138 to Sunshine Park
Duck Pond Path	I-5 to the Stewart Park Duck Pond
Hwy 99 Trail	Edenbower to North Umpqua River
NE Vine Street	Alameda Avenue to Meadows Avenue
NE Stephens Street/ NE Winchester Street	Garden Valley Boulevard to Diamond Lake Blvd

Each of the routes are briefly described below. Additional information summarizing the existing conditions and improvement options for the critical routes can be found in the *Bicycle and Pedestrian Plan Support Document*.

NW Calkins Avenue

NW Calkins Avenue is a collector street that provides an east-west connection linking existing sidewalks and bike routes. The route connects to Roseburg Junior Academy, Hucrest Elementary, as well as several neighborhoods. Improvements would slow existing traffic, provide sidewalks and bicycle facilities. Interim improvement options are available for this route.

NW Highland Street/NW Fairmount Street

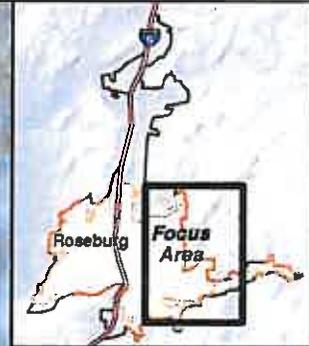
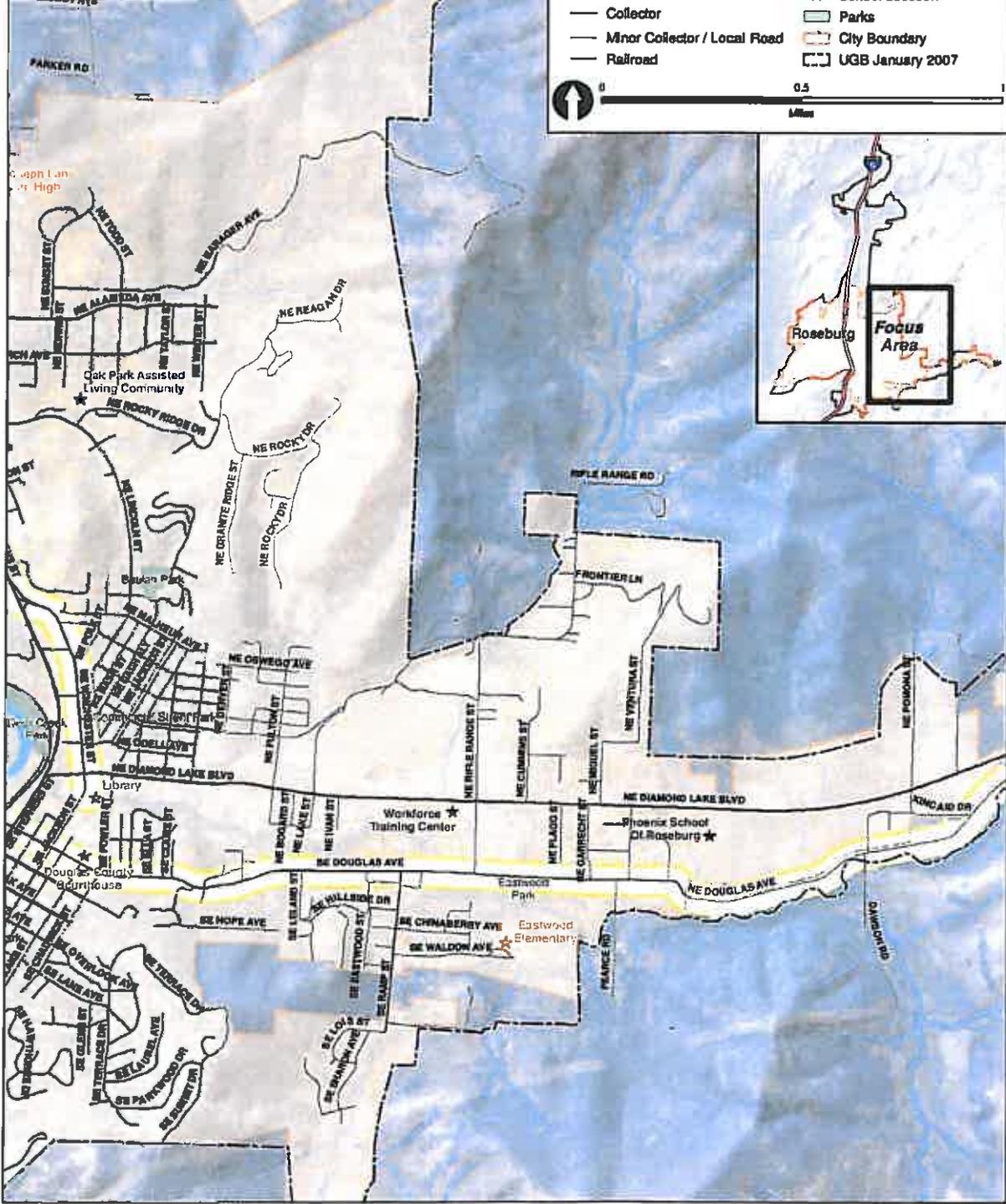
Fairmount Street is a local residential street that connects between Stewart Parkway and Garden Valley Boulevard. The route does not have any sidewalks and serves as a cut-through route for motorists avoiding the railroad crossing to the east. Because of the limited right-of-way available, a “woonerf” street treatment is recommended with traffic calming at each end of the street to deter cut through traffic. A pedestrian crossing is recommended on Garden Valley Boulevard in the vicinity of Fairmount Street and Highland Street. One of primary accesses to Gaddis Park is via Highland Street. The residents in the area cross Garden Valley Boulevard to access the park and other businesses without the benefit of a crosswalk. The nearest signalized crosswalks are at Airport Road and Mulholland Drive, more than 800 feet away. The existing traffic volumes and speed on Garden Valley Boulevard may require a signalized crossing.

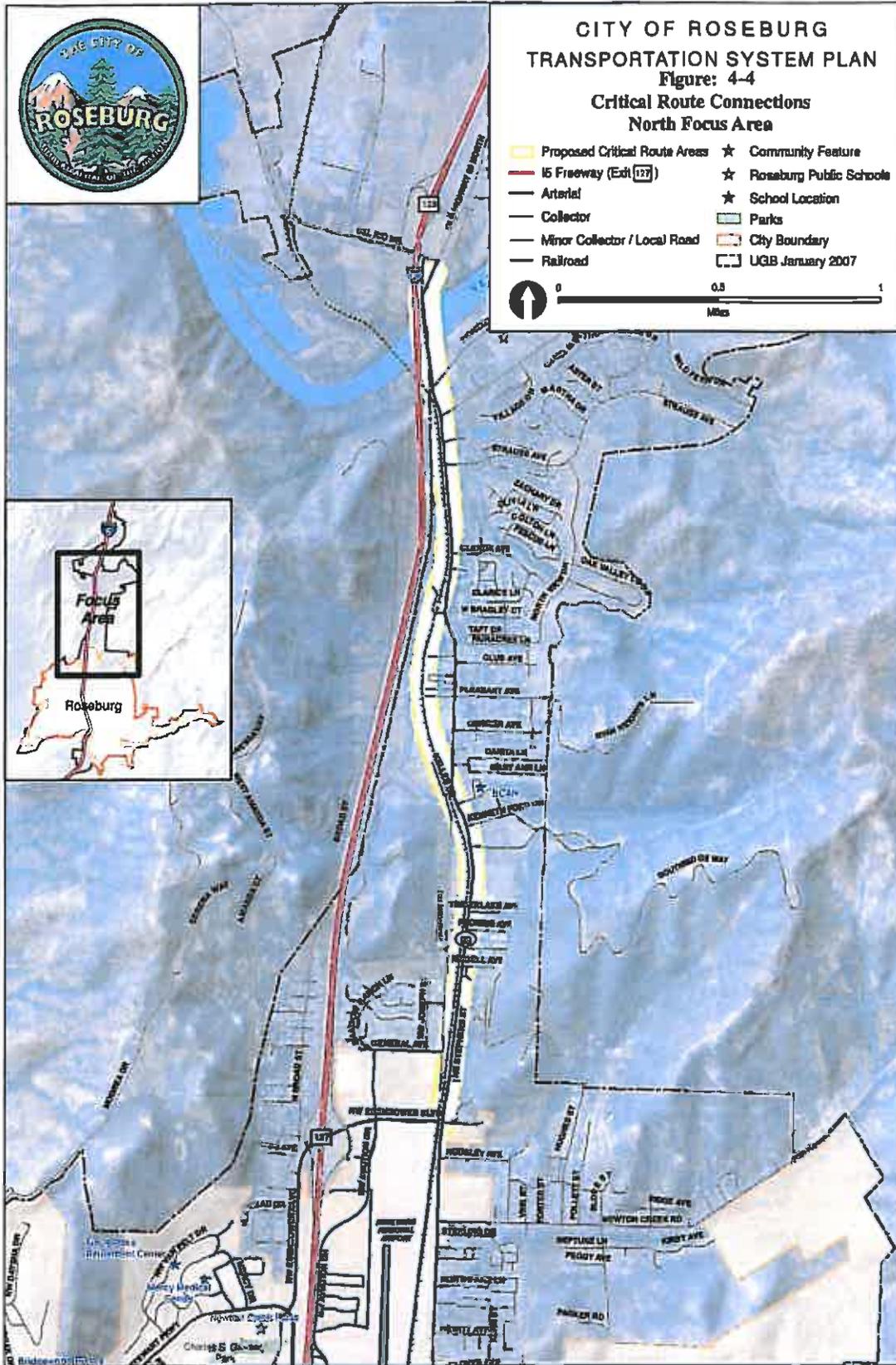
Highland Street is designated as a bicycle route but lacks bicycle facilities, while sidewalks are missing from a portion of the roadway. Sidewalks, sharrows, and parking restrictions on a portion of the roadway are recommended. A multi-use path is an optional facility on an unused portion of right-of-way connecting to Gaddis Park. The critical route connects neighborhoods and businesses to park and multi-use path network.



**CITY OF ROSEBURG
TRANSPORTATION SYSTEM PLAN
Figure: 4-3
Critical Route Connections
East Focus Area**

- Proposed Critical Route Areas
- I5 Freeway (Exit 127)
- Arterial
- Collector
- Minor Collector / Local Road
- Railroad
- Community Feature
- Roseburg Public Schools
- School Location
- Parks
- City Boundary
- UGB January 2007





Washington Avenue and Oak Avenue are split one-way east/west arterials between I-5 and Stephens Street serving traffic between downtown and the west side of town crossing the South Umpqua River. These arterials also serve through traffic from I-5 to Diamond Lake Boulevard. The roadways currently provide only narrow, substandard bicycle lanes and sidewalks on the only direct connection over the South Umpqua River between downtown and the west side. There are two improvement options that have been identified. The first is to restripe to provide more adequate bicycle lane width. The second is to provide a widened sidewalk and/or shared facility.

NE Douglas Street

Douglas Street provides connections from the western parts of the city and downtown to areas east including Sunshine and Eastwood Parks, several schools, Umpqua Community College Workforce Training Center, neighborhoods, and planned mixed use and industrial areas. The route provides an alternative to Diamond Lake Boulevard, a five-lane highway with a posted speed up to 55 mph. A combination of sharrows and bicycle lanes, with restricted parking to one side of the street, are recommended for the improved sections of Douglas Street out to Rifle Range Road. A multi-use path is recommended from Rifle Range Road out to Sunshine Park.

NE Vine Street

Bicycle, pedestrian, and school improvements are recommended for Vine Street. The route serves several neighborhoods and a middle school and offers a parallel route to Stephens Street. This improvement is under design and scheduled for construction in 2010.

Duck Pond Path

A multi-use path is recommended to connect from the existing path to the Duck Pond parking lot. The route completes an off street loop and provides an alternative to facilities along Garden Valley Boulevard. The route provides connections to Fred Meyer, Veterans Affairs Health Care System, and Bureau of Land Management offices.

Highway 99 Trail

A multi-use path is recommended to provide a safe regional connection to areas north of town, including Umpqua Community College, the North Umpqua River, parks, services and neighborhoods. It offers an off-street alternative to Highway 99 that is a high speed facility with intermittent existing facilities.

West Harvard Avenue

West Harvard Avenue links the west part of town to existing multi-use paths, several schools, parks, retail, employment areas, and services. It serves as an arterial to local residents and businesses and connects to Stewart Parkway and downtown Roseburg with speeds between 20 and 35 mph. The roadway lacks bicycle lanes except for a section near I-5. There is high pedestrian and bicycle volumes sharing the sidewalks, and high volumes of vehicle traffic on the roadway. Access management, bicycle and improved pedestrian facilities are recommended along the corridor.

Currently there is insufficient width between W. Umpqua Street and Lookingglass Road to provide bike lanes within the existing pavement, widen the sidewalks without impacting the existing lane configuration or provide the Roseburg arterial standard cross section (Figures 4-6

and 4-7). The Roseburg Transportation System Plan (TSP) identifies future areas of growth in Roseburg, namely the Charter Oaks area, will access this corridor and would impact the mobility and safety. Future improvements must consider the needs of all the travel modes, the impact to businesses, neighborhoods and land uses, and the vision and desires of the community. If Charter Oaks is developed, it is recommended that a Harvard Avenue Safety and Capacity Refinement Study be conducted. Further traffic analysis is needed to address all travel modes.

Access management along the corridor should be considered, eliminating the center turn lane, providing bicycle lanes and turn lanes only at key intersections (Figure 4-8). This approach would require right-of-way and alter access to businesses and residents that would require further assessment for feasibility and public involvement. Additionally, in the short-term, I-5 Ramp Safety improvements are needed.

Figure 4-6. Typical Existing Arterial Cross Section

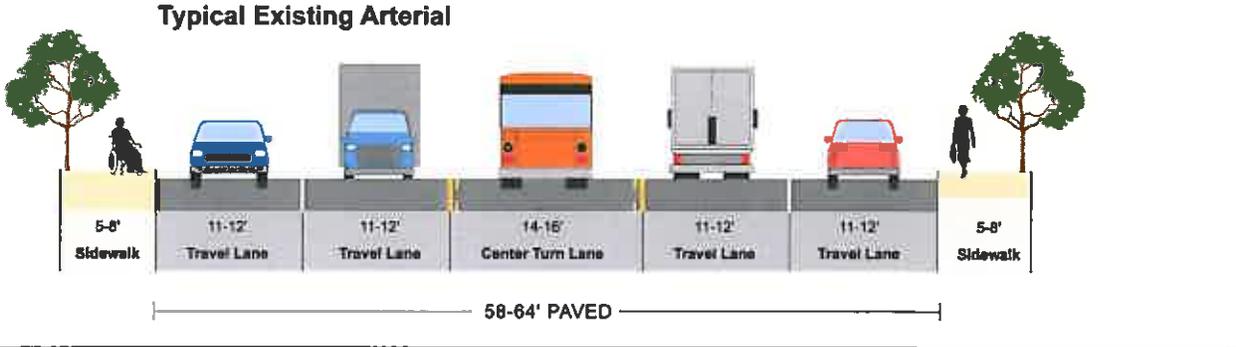


Figure 4-7. Roseburg Arterial Standard Cross Section

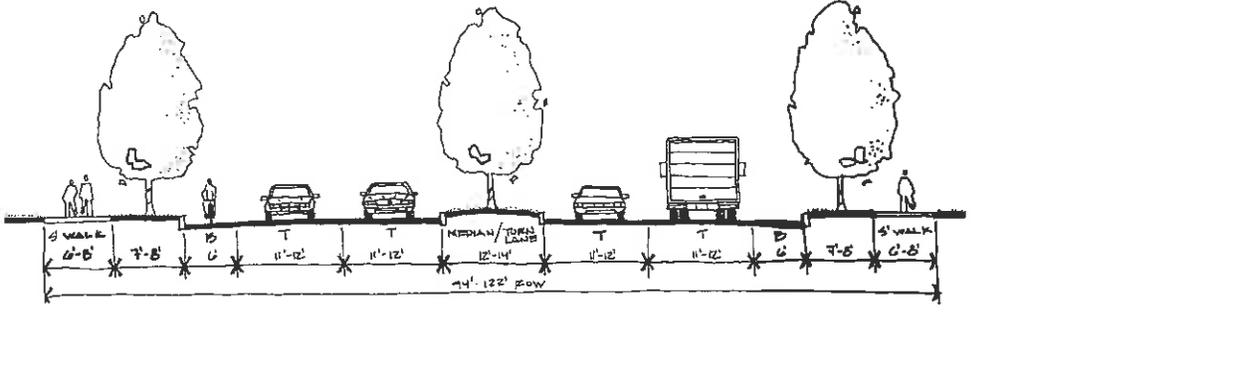
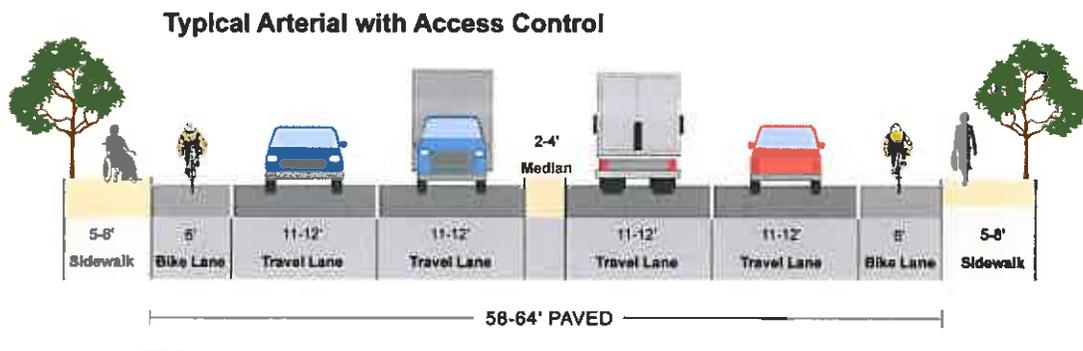


Figure 4-8. Typical Existing Arterial Section with Access



NE Stephens Street/NE Winchester Street

Stephens Street is the main north-south arterial serving local residents and businesses and also serves as a highway for through travelers. The adjacent land uses include retail and employment centers, with numerous curb cuts and significant distances between signals. Winchester Street runs parallel to Stephens Street and connects to Diamond Lake Boulevard and downtown Roseburg. It provides bicycle and pedestrian facilities, however additional amenities and bus stop connections are recommended. A crossing treatment at Winchester Street and Stephens Street is also recommended. Access management is needed for Stephens Street and the addition of bicycle lanes and widened sidewalks from Winchester to Garden Valley Boulevard. The facilities would provide connections to other bicycle and pedestrian facilities, downtown, neighborhoods and business destinations. Stephens Street faces the same challenges as Harvard Avenue in providing bike lanes and improving pedestrian facilities within the existing improved cross section. The Roseburg TSP identifies a Stephens Street Safety and Capacity Improvement Study to evaluate safety and capacity improvements along the arterial.

NW Garden Valley Boulevard

Garden Valley Boulevard is one of the few ways to cross I-5. It intersects two arterials, Stewart Parkway and Stephens Street, and connects to off street paths, Mulholland Street bike lanes, and Highland Street access to Gaddis Park. The Garden Valley Boulevard interchange provides on/off access to I-5 and has a posted speed of 35 mph. The overcrossing has substandard sidewalks and no bike lane, and bicycle lanes are also absent from Garden Valley Blvd. east to Stephens Street. There are also numerous driveways on Garden Valley Boulevard and difficult crossings of the I-5 ramps. Restriping of the overcrossing to add bicycle lanes, widened sidewalks, and colored bicycle lanes across the ramps is recommended. There appears to be sufficient existing pavement width, an unused striped median area, on the overpass to restripe and add bicycle lanes. Access management should be implemented on Garden Valley Boulevard and bicycle lanes should be added, sidewalks widened or obstructions removed. Garden Valley Boulevard faces the same challenges as Harvard Avenue in providing these facilities within the existing improved cross section. The Roseburg TSP identifies a Garden Valley Boulevard Refinement Study to evaluate safety and capacity improvements along the arterial.

Transportation System Plan Chapter 7 – Additional Text

ADDRESSING BARRIERS TO TRAVEL

There are a variety of ways to improve walking and bicycling in Roseburg, namely through the FiveE's—Engineering, Education, Enforcement, Encouragement, and Enjoyment.

Engineering, operating, and maintaining quality bicycle and pedestrian facilities is a critical element in producing a comfortable and safe environment for all users. The engineering solutions to improve the quality of the pedestrian and bicycle network include traffic calming, access management and facility design.

Education can be a powerful tool for changing behavior, perception, and improving safety. Pedestrians, bicyclists, and motorists alike can benefit from educational tools and messages that teach them the rules, rights, responsibilities and benefits of various modes of travel.

Enforcement of traffic laws and regulating pedestrians, motorists, and other roadway users is a key element for ensuring a safe and healthy walking environment. Enforcement programs can be used to educate transportation facility users about the traffic laws that govern them, serve as periodic reminders to obey traffic rules, encourage safer behaviors, and monitor and protect public spaces. They can also help reinforce and support educational programs, and address issues related to personal safety.

Encouragement activities that target individuals, organizations, or events to promote walking and bicycling, create awareness about bicycling and pedestrian issues and inform others to the ways that bikeable and walkable places foster healthier, more livable communities. Employers, retailers, and schools may offer incentives to encourage bike and pedestrian travel as well as organizing fun events.

Enjoyment was added by the Ad Hoc committee of Roseburg citizens during the bicycle and pedestrian plan process. It is understood that in order attract more users to bicycling and walking, the activity should also be enjoyable and fun. Opportunities to increase the enjoyment of these activities should be considered.

Three strategic improvement plan elements have been identified to incorporate the five “E’s” into the bicycle and pedestrian components of the transportation system plan.

Network – Based on assessment and public input, a recommended pedestrian and bicycle network is mapped for the City. (See Chapter 4 of TSP)

Programs – Along with a recommended network of facilities, recommended pedestrian and bicycle programs to complement the system improvements and highlights a variety of methods for addressing walkers’ and bicyclists’ needs. (See Chapter 7 of TSP)

Implementation–

- Established objectives for bicycle and pedestrian travel that supports and expands TSP goals and objectives. Recommended policy strategies that support goals and objectives that directs a course of action. Upon adoption, a policy commits the City,

County and ODOT to the principal plan, or course of action, set forth in the policy statements.(See Chapter 7 of TSP)

- Recommended design guidelines and standards for facility treatment in Roseburg and a “Toolbox” of other improvement opportunities for bicyclists and pedestrians, assembled in the *Bicycle and Pedestrian Plan Support Document*.
- Identified potential strategies for funding the recommended pedestrian and bicycle projects and programs. (See *Bicycle and Pedestrian Plan Support Document*).

Figure 4-9 illustrates how the programs and projects are related in the Bicycle and Pedestrian element of the TSP. Descriptions of these programs follow.

OUTREACH PROGRAMS

Several outreach programs were identified in the Bicycle and Pedestrian “Toolbox.” The following specific outreach programs were selected for emphasis based on identified public interest and needs.

Bike and Walk School Safety

The Bike and Walk School Safety program refers to a multi-disciplinary program aimed at promoting walking and bicycling to school and improving traffic safety around school areas through education, incentives, increased law enforcement, and engineering measures. These programs, including the national Safe Routes to School, typically involve partnerships among municipalities, school districts, community and parent volunteers, and law enforcement agencies. Roseburg’s efforts can facilitate the implementation and funding for specific improvements that will help increase bicyclist and pedestrian safety and encourage fewer auto trips.

The City has a vested interest in encouraging school children to lead active lifestyles. Bike and Walk School Safety programs offer ancillary benefits to neighborhoods by helping to slow traffic and by providing reasonable facilities for walking by all age groups. The City benefits from a generally well-connected street system near most schools, a critical element in encouraging children to bike and walk to school.

In order to be successful, a Bike and Walk School Safety program in Roseburg will need buy-in from individuals and organizations throughout the community. While each individual school will have unique concerns and goals for developing a Bike and Walk School Safety program, an organizational strategy that promotes the sharing of ideas between schools can be more effective than several isolated school groups. The key components of an effective Bike and Walk School Safety program include champions (individuals at each school who spearhead their school’s organizing effort), stakeholders (a team of people from an individual school), and a task force made up of all the stakeholder teams in the community.

The basic components of the proposed Bike and Walk School Safety program include bicycle/pedestrian safety education, encouragement, engineering improvements, and enforcement of traffic laws.

Safety and Maintenance Call-In Line and E-mail

In order to ensure that conditions are safe and well-maintained for pedestrians and bicyclists, the City/County/Oregon Department of Transportation should consider providing a call-in line or e-

mail address where facility users can inform the proper agency of non-emergency issues. Such a line should gather information about pavement repair, potholes, fading bike lane striping, and traffic safety issues. Through inter-agency collaboration a response matrix would be established so that information would be routed to the appropriate department or agency. Information gathered could help ensure efficient and proper maintenance of pedestrian and bicycle facilities, a critical element of providing and encouraging use of a safe and user-friendly system. Information could also be used to focus or enhance enforcement efforts to address a potential safety issue.

Website

One of the most effective ways of encouraging people to bike and walk is to provide a 'one stop shop' for users to gather useful information and advice. This information could serve residents, visitors, employees, students, and businesses. Roseburg has numerous existing resources for pedestrians and cyclists, and more services and resources are planned for the future. However, many pedestrians, cyclists or potential pedestrians and cyclists do not know where to turn to educate themselves about laws, events, maps, tips, and walking or bicycling groups. The community could create the website or assist an agency in keeping the site up to date. A website could provide this "one-stop shopping" and would not be difficult to set up, but it will only be successful if the site is both easy to use and updated regularly.

Bicycle-Pedestrian Advisory Committee or Alternative Transportation Committee

Establish a standing committee to advise and advocate for bicycle and pedestrian issues. Many cities or counties have a Bicycle and/or Pedestrian Advisory Committee (BPAC) to advocate or advise on issues related to bicycling, walking and accessibility. The committee usually is composed of citizen volunteers who may be appointed by the mayor or council. In some jurisdictions, one committee is formed that considers bicycle, pedestrian and/or traffic safety issues.

Common charges of BPACs include some or all of the following:

- Review and provide citizen input on capital project planning and design as it affects bicycling and walking (e.g., corridor plans, street improvement projects, signing or signal projects, and parking facilities).
- Review and comment on changes to zoning, development code, comprehensive plans, and other long-term planning and policy documents.
- Participate in the development, implementation and evaluation of Bicycle and Pedestrian Master Plans and standards.
- Provide a formal liaison between city government, staff, and the public.
- Develop and monitor goals and indices related to bicycling/walking in the jurisdiction.
- Promote bicycling and walking, including safety and education.

If a BPAC is an officially sanctioned committee, it is useful to have staff supporting the committee in order for it to be successful as well as a liaison to the City Council or a City Commission. An agency staff person, ideally a Bicycle/Pedestrian Coordinator, should be formally assigned to the BPAC. They would be responsible for managing the application process, organizing agendas and minutes, scheduling meetings, bringing agency issues to the BPAC, and reporting back to the agency and governing body (such as Council) about the BPAC's recommendations and findings.

At this time it is recommended that BPAC would be a community organized and sponsored committee with a representative to serve as an ex officio member to the Public Works Commission. In the future City sanctioned BPAC will be considered.

Bike Rack – Art Design Competition

Several Cities and organizations have sponsored bike rack design competitions, to develop functional sculptures that provide bicycle parking locations. A small cash prize could be offered or businesses can sponsor an artist. These artistic racks add personality and a sense of place to a sidewalk or commercial area. Placed in all quarters of town, bike racks provide opportunities for residents and visitors to secure their bicycle while exploring Roseburg. Improved connections throughout town and particularly to downtown and the waterfront areas will result in more visits via bicycle, which will require additional parking facilities.

Public Education

Public education can be a useful tool for changing behavior, improving safety, and encouraging users. Pedestrians, bicyclists, and motorists alike can benefit from educational tools and messages that teach them the rules, rights, responsibilities, and enjoyment of various modes of travel. The goals of an education program should be specific, measurable, and related to the problems or desired outcome identified.

Education need not be limited to younger schoolchildren. Adult bicycle education and safety programs can be developed from existing courses, such as the League of American Bicyclists courses. Sometimes knowledge on the rights of bicyclists and pedestrians is limited. Education about the rights and responsibilities of motorists, pedestrians, and cyclists can include:

- Incorporating bicycle and pedestrian safety into traffic school curriculum.
- Providing information to the public and others in a variety of ways, including producing a brochure on bicycle and pedestrian safety and laws for public distribution that includes information about:
- Enforcing traffic laws for cyclists.
- Providing bicycle and pedestrian planning training for law enforcement and city/county staff.
- Working with contractors, subcontractors and city maintenance and utility crews to ensure they understand the needs of bicyclists and pedestrians and follow standard procedures when working on or adjacent to roadways and walkways.

Incentive programs

Outreach programs could offer incentives and encouragement to residents, employers and their employees, and students that bike and walk, thereby reducing vehicle miles traveled. The incentives could be both financial and non-financial and originate from a variety of sources. Incentives could be facilitated by groups besides the City, however, any incentives related to land use or zoning would require City and/or County administration and adoption as code or policy.

Program ideas are noted below:

- Employer incentive programs that encourage employees to walk and bike to work include strategies like providing bicycle lockers and shower facilities, offering more flexible arrival and departure times, and fun incentives. The City may model such incentives for their own employees.

- Incentive programs to encourage bicycling and walking to local businesses may be developed in coordination with individual businesses and the Chamber of Commerce.
- A bicycle-friendly business program may train, support, and recognize businesses who encourage bicycling among their employees and customers.
- A Bike Buddies program may be designed to provide an introduction to commuting to work. Bike Buddy programs connect people who are interested in learning safe routes from home to the office with more experienced riders.

EVALUATION-INVENTORY PROGRAMS

Documenting the presence and status of bicycle and pedestrian facilities allows agencies to identify and prioritize locations where improvements are needed. Knowing where current or potential bicycle and pedestrian use is high also enables agencies to focus planning efforts on areas where the benefits would be maximized. Having a strong fact-base plan can also help gain political support for improvements and programs by revealing problem areas and demonstrating opportunities for improvements.

Traditional infrastructure elements include bicycle lanes marked on roadways and sidewalks or shared use paths. However, documentation of other elements is important to understanding where users can and cannot safely travel.

A useful report is the *FHWA Pedestrian and Bicycle Data Collection in United States Communities: Quantifying Use, Surveying Users, and Documenting Facility Extent, 2005*. The report documents existing data collection efforts from several different communities, summarizes results, and discusses lessons learned.

Crash Reporting

It is important to create a process for reporting, collecting, and reviewing bicycle-pedestrian related crash information. Often only a fraction of crashes actually get reported by or to a police agency. However, crash data can indicate an existing safety issue that could be easily remedied with engineering improvements or maintenance, education, and enforcement efforts. The efforts to collect crash data should include coordination with police and sheriff departments and local hospital/medical providers.

Sign, Signal, and Crosswalk Inventories

Mapping and creating an inventory of existing bicycle and pedestrian related signage, signals and crosswalks ensures that existing facilities are properly placed and functioning. Sign inventories include warning signs, share-the-road signs, route and directional signs, and school-related signs, and their condition to ensure reflective value. Signal inventories document pedestrian buttons and signals, bicycle loop detectors, and record timing and usage. Crosswalks should also be inventoried for proper location, treatment, lighting, and condition. Wayfinding or interpretive signage may also be included in the inventory.

Volume Counts

This program would establish a process to regularly measure bicycle and pedestrian activity in Roseburg. Knowing current and potential bicycle and pedestrian demand is useful for prioritizing investments and evaluating the impact of other programs. Counts are commonly implemented at the facility, corridor, or community-level. Data collection can be expensive, but many agencies have developed innovative approaches to reduce the cost of collecting such data, including using

shared technologies, volunteer labor, and piggy-backing bicycle and pedestrian data into current motorized vehicle data collection programs. Volume counts may also be supplemented through surveys of actual users.

Bicycle Parking Inventory

The fear of bicycle theft is recognized as a significant deterrent to bicycle use. The availability of safe and convenient parking is as critical to bicyclists as it is for motorists, and yet it is frequently overlooked in the design and operation of shops, offices, schools, and other buildings. An audit and mapping of existing bicycle parking would check that good quality bicycle parking exists that is safe, useful, and located where it is needed. The inventory could relocate underused bicycle racks to locations that lack any appropriate facilities.

Storm Grate Review

Bicycle lanes should be provided with adequate drainage to prevent ponding, washouts, debris accumulation and other potentially hazardous situations for cyclists. Drainage grates should also be bicycle safe, installed properly, at grade, and well maintained. Mapping and review condition of existing storm drainage and grates on bike routes is important to address any existing safety issues, as well as informing drainage maintenance schedules.

Annual Review

The Bicycle and Pedestrian Plan should be a living document that responds to opportunities and issues as they arise. Once completed, the plan or implementation measures should be regularly reviewed and updated, particularly the bicycle and pedestrian plan programs/projects and their associated priorities. A regularly scheduled facility tour would also be useful to review accomplishments, opportunities, and deficiencies.

Planning/Design Review

It is important that the goals, policies, and programs adopted in the Roseburg Bicycle and Pedestrian Plan be considered in the development of other plans, projects and policy when appropriate. Citizens, staff, and/or bicycle-pedestrian advisory committee should review and provide input on capital project planning and design as it affects bicycling and walking (e.g., corridor plans, street improvement projects, signing or signal projects, and parking facilities). They should also review and comment on changes to zoning, development code, comprehensive plans, and other long-term planning and policy documents.

CONSTRUCTION IMPROVEMENT PROGRAMS

Engineering, operating, and maintaining quality bicycle and pedestrian facilities is a critical element in producing a comfortable and safe environment for all users. The engineering solutions to improve the quality of the pedestrian and bicycle network include both small and larger projects. Construction improvements projects have been divided into four programs to most effectively respond with available resources and future funding potentials. A complete list of specific improvement projects is included in Appendix A.

Spot Improvements

Having the ability to respond quickly to the requests of bicyclists and pedestrians will enhance Roseburg's standing as a bicycle- and pedestrian-friendly community. A Spot Improvement Program could be funded once a year, with all funds dedicated to smaller spot improvements

identified by City staff, bicycle and pedestrian committee, and residents. Such improvements might include:

- Striping and signing to increase safety and path user compliance along a heavily-used path,
- Adding bicycle parking to locations that currently lack appropriate or insufficient parking,
- Sidewalk infill to safely connect vital pedestrian routes, especially in school areas,
- Adding appropriate directional and informational signage along paths, sidewalks, and bicycle routes,
- Installing lighting along route or path,
- Adding landscaping and features, and
- Applying traffic calming treatments to existing roadways.

Accessibility Improvements

It is important to note that a pedestrian environment that is strategically built to be accessible for people with disabilities is also more accessible for all. Curb ramps, for instance, can accommodate strollers, shopping carts and dollies for the movement of goods. Accessible intersection crossings can increase the safety for people regardless of ability. In recognition of this, the City's philosophical approach is to create pedestrian environments that are attractive, functional, and accessible to all people. As a part of the implementation of the Americans with Disabilities Act (ADA), the Justice Department requires that all municipal jurisdictions have an ADA Transition Plan, which is intended to spell out the City's intentional retrofitting of its built environment to an accessible state.

While the elements of many of the construction improvements projects will accommodate people with disabilities, a separate list of improvements with greater specificity is required. The ADA Transition Plan should use all the relevant strategies identified in the "Toolbox" as well as other current practices that have merit. Monies set aside to implement the ADA Transition Plan should be focused on accessibility improvements including: ADA-compliant ramps, street/railroad crossing treatments, and other measures to provide access for users with mobility, cognitive, and sensory impairments. Specific funding is available for ADA compliance and improvements.

Signal, Sign and Stripe Improvements

Maintaining and improving signals, signing and striping of bicycle and pedestrian facilities ensures safe and efficient travel through town, and between destinations. These measures are a relatively cost-effective means for improving the walking and bicycling environment.

A Signal, Sign and Stripe Improvement Program could also be funded once a year, with all funds dedicated these improvements or they could be included with other programs such as the Spot Improvement Program. Improvements might include:

- Warning signing to increase safety and user compliance,
- Adding appropriate wayfinding and informational signage along paths, sidewalks, and bicycle routes,
- Striping of bicycle lanes or crosswalks where it is warranted,
- Installation of bicycle loop detectors at intersections,
- Signal modifications for pedestrians such as countdown signals, and
- School zone treatments.

Comprehensive Project Program

Providing bicycle and pedestrian facilities in some situations requires a more involved process and cost for planning, preliminary engineering, and construction. The Comprehensive Project Program consists of these larger scale projects. These projects may be accomplished as part of existing capital improvement roadways or parks projects, or as stand alone planning or engineering projects.

The highest priority projects in the program represent projects for corridors identified as critical routes. Phased projects were recommended for some of these routes. Appendix A includes a comprehensive list of improvement project.

PROJECT PRIORITIZATION

Transportation System Plans are typically implemented using a combination of funding over decades, and they often require a combination of private, local, state, and federal funding and participation. A deliberate phasing and prioritization strategy is required to effectively focus available funding, maximize funding and implementation, and meet the needs of the community, while also allowing flexibility to maximize projects completed. The following elements were considered in the development of the phasing and prioritization of bicycle and pedestrian construction improvements and programs.

- **Need:** Based on prior plans, data collection, field observation, considerable public comment, and input from the Ad Hoc Committee (AHC) and Project Management Team (PMT) throughout the process has provided direction.
- **Feasibility:** Considers the size and corresponding cost of the improvements and the best opportunity for implementation and funding. Projects that do not usually require acquiring right-of-way, such as restriping or adding sidewalks, are easiest to implement. Easier projects were prioritized higher than projects requiring expensive or potentially controversial right-of-way acquisition.

Construction Improvement Prioritization

Recommended infrastructure related improvements include the following types of projects, which differ in terms of priority, impact and funding availability and need:

- Spot Improvements
- Signal, Sign and Stripe
- Accessibility Improvements
- Comprehensive Project Program

As previously discussed in Chapter 3, critical routes were identified through an evaluation of important destinations to be connected, and which routes best achieve the desired connections. These connections were then refined and prioritized based on the criteria of connectivity, system users, safety and comfort, addressing travel barriers, livability and feasibility and alternatives. The critical route projects comprise the highest priority projects in the Comprehensive Project Program.

The lists of projects in each of the programs were identified and prioritized for completion on the basis of, need and feasibility, particularly project costs and public and committee support. Other projects may potentially have greater impact to vehicle traffic, access, businesses, such as

removing parking or narrowing lanes, and require a longer-term and comprehensive review to build public support prior to implementation.

Construction projects were then categorized into short-term, medium-term and long-term. While all of the projects designated as critical routes are important to the development of Roseburg's bicycle and pedestrian network, focusing on the most viable and publicly supported projects can build momentum and set the groundwork for future investments. The categories reflect the prioritization strategy previously discussed, with previously-determined, publicly supported, easy-to-implement and less-expensive projects designated as short-term. Any of these projects should proceed when conditions warrant.

It must be recognized that these construction projects, while deemed the most important, may not all get built within the time periods noted due to fiscal constraints.

Short-Term Improvements

Projects selected for short-term development are considered the highest priority for implementation. In addition, projects that have the highest impact for the lowest cost and are relatively simple to implement were selected as short-term projects. These projects should be implemented within the first five years after the bicycle and pedestrian additions are adopted and are illustrated in Figure 7-2.

The following projects were designated as short-term projects:

- Oak and Washington Street Bridge Restriping
- Douglas Street (Fowler To Rifle Range Road) –Striping and sidewalk gap)
- W. Harvard (storm grate elevation fixes)
- Rowe Street railroad trestle undercrossing
- Aviation Drive (sidewalk gap south of Edenbower Blvd)
- Washington, Oak and Douglas railroad crossing improvements (for bikes and pedestrians)

- Harvard Avenue I-5 Ramp Safety Improvements
- Duck Pond Multi-Use Path
- Vine Street, Alameda Ave to Meadow Ave (bike lanes and sidewalks)
- NW Garden Valley Refinement Plan
- NE Stephens St Refinement Plan
- Garden Valley Blvd. Overcrossing of I-5 (Bike lane restriping)

Medium-Term Improvements

Medium-term projects may be likely to have less impact, require more planning/design efforts, or maybe more expensive to construct than short-term projects. Projects selected as medium-term are routes that should be implemented within six to fifteen years and are illustrated in Figure 7-2.

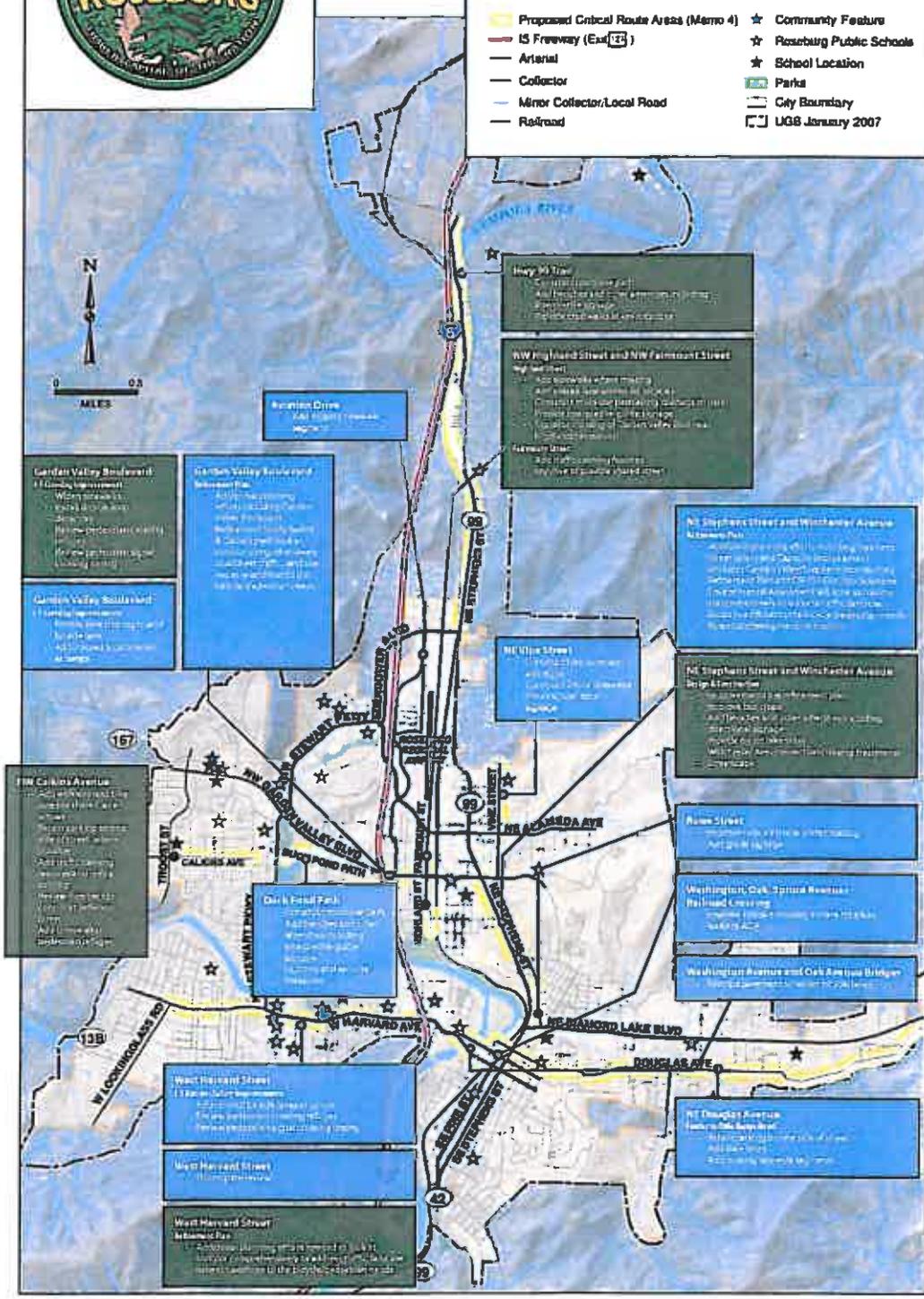
The following projects were designated as medium-term critical routes:

- NW Calkins Ave Traffic Calming
- W Harvard Ave Refinement Plan
- Hwy 99 Trail (Edenbower over No. Umpqua)
- NE Stephens St/ Winchester Design and Construction
- Garden Valley Blvd. Overcrossing of I-5 (Sidewalk widening and enhancements)
- Highland/Fairmount (Sidewalks, signage, traffic signal)



**CITY OF ROSEBURG
TRANSPORTATION SYSTEM PLAN**

**Figure 7-2
Short and Medium Term
Bicycle and Pedestrian Projects**



Long-Term Improvements

Projects designated long-term have less identified need or are considered more expensive or potentially controversial to construct. Long-term projects are routes that should be implemented within fifteen to twenty years. All critical route projects in this Plan that were not incorporated into the short- or medium-term project lists are considered long-term Projects.

The projects designated as long-term critical routes are shown in Table 7-1, 7-2, and 7-3 as follows

Table 7-1. Recommended Long-Term Multi-Use Construction Improvements

Name	Description
Deer Creek Pathway	South Umpqua River to Douglas Street Bridge
Portland Avenue Bridge	New bridge crossing South Umpqua River
I-5 Westside Path	Adjacent to I-5 between Edenbower Blvd. to Dogwood Street or Hill Ave
S. Umpqua River – West Riverbank	Along the S. Umpqua River connecting the Fairgrounds to the Shady Bridge
Stewart Park	Adjacent to Stewart Park Drive from Harvard to S. Umpqua River
S. Umpqua River – East Riverbank	Along the east side of the S. Umpqua River from Douglas Avenue to Portland Avenue (new crossing)
S. Umpqua River – West Riverbank	Along the west side of the S. Umpqua River from Kendall St. to Fairgrounds
Umpqua College Rd Connection	N. Umpqua River crossing to Umpqua Community College
Davis Creek Trail	Davis Creek
Newton Creek Trail	Newton Creek from Charles Gardner Park to Garden Valley Blvd.
Harvard Avenue Bridge	Harvard Avenue Bridge and Harvard Avenue, west of Lookingglass Rd.
Troost Street Trail	Troost Street
Pilger Street Trail	Pilger Street
Commercial Street Trail	Commercial Street
Jackson Street Trail	Trail under Jackson Street Bridge over Deer Creek
Deer Creek Bridge	Bridge across Deer Creek
Keasey Connection	Connect Keasey Street near Domenico Drive to Stewart Parkway
Troost St. Connection	Connect Whipple St/Riverview Drive to Troost St.
Finlay Ave Connection	Connect path at South Umpqua crossing to Finlay Ave/Bowden St
N. Umpqua Crossing	Crossing of N. Umpqua River at I-5 Bridge

Table 7-2. Recommended Long-Term Bicycle Lane Construction Improvements

Name	Description
Alameda Avenue	Vine St. to east end
Broad Street	Bike lanes on Broad St. from the Edenbower interchange to the new road connection
Garden Valley Blvd.	Melrose Rd. to Troost St.
Ramp Street	Douglas Avenue to east and eventual connection to Terrace Dr
Spruce Street	Douglas Avenue to Mosher Avenue
Garden Valley Blvd.	Stephens St. to Mulholland Dr

Main Street	Add bike lanes on collector
Mosher Avenue	Spruce St. to Mill St.
Mosher Avenue	Add bike lanes on collectors
Rice Avenue	Mill St. to Pine St.
Troost Street	From end of existing bike lanes to the west end connecting to new street connection
Jackson Street	Diamond Lake Blvd. to Douglas Avenue
Keasey Avenue	Entire length

Table 7-3. Recommended Long-Term Sidewalk Improvements

Name	Description
Broad Street	Add new sidewalk at the northern portion of Broad St.
Stewart Parkway and Garden Valley Blvd	Add sidewalk on Stewart Parkway north of Harvey Avenue and continuing west along Garden Valley Blvd.
Troost Street	Add sidewalks along Troost St. south of Calkins Rd. to Charter Oaks Dr.
Lookingglass Road	Add sidewalks along length of Lookingglass Road to Urban Growth Boundary
Old Melrose Road	Add sidewalks along Old Melrose Rd. from Harvard Avenue to Urban Growth Boundary
Lincoln Street	Add sidewalks along Lincoln St. south of Garden Valley Blvd. and north of Diamond Lake Blvd.
Fulton Street	Add sidewalks along Fulton St. from Diamond Lake Blvd. north to end of public street
Shambrook Avenue	Add sidewalks along Shambrook Avenue between Stephens St. and Winchester St.
Ramp Street	Add sidewalks along the length of Ramp St.
Pine Street	Add sidewalks along Pine St. from Rice Avenue south to existing sidewalk
Main Street	Add sidewalks along Main St. from Rice Avenue south to end
Templin Park	Sidewalks and drainage

Evaluation/Inventory and Outreach Programs

The programs recommended in this Plan are a relatively inexpensive method for improving and raising public awareness and adding to the safety and enjoyment of bicycling and walking in Roseburg. Because of their minimal expense and importance to supporting the bicycle and pedestrian travel and thereby increase usage, all of the recommended programs are designated for short- or medium-term implementation.

It is recommended that the evaluation and inventory programs not specifically recommended as short-term be conducted at least one per year until the list is completed. These may be done with volunteers, students, or summer interns.

Short-Term Programs

Programs designated for short-term development were identified as highest priority. Similarly as for the construction projects, programs that have the highest impact for the lowest cost were selected as short-term programs. These programs should be implemented within the first five years.

The following programs were designated as short-term priority and previously described:

- Bike-Walk School Safety
- Incentives Programs
- Bicycle-Pedestrian Advisory Committee
- Maintenance-Safety Hotline
- Public Education
- Storm Grate Review

When formed, the Bicycle-Pedestrian Advisory Committee is recommended to take on the program tasks of Annual Review and Planning/Design Review; prior to the City forming an official Committee, Council should agree to an ex officio member of the Public Works Commission as a representation from the community organized committee.

Medium-Term Programs

Medium-term programs should be implemented within six to fifteen years.

The following were designated as medium-term programs:

- Art Bike Rack Design Contest
- Crash Reporting
- Website Resources
- Volume Counts
- Inventory updates
- Wayfinding-Guide Signage

Regular Maintenance

Like all roadways, bicycle and pedestrian facilities require regular maintenance. This includes sweeping, maintaining a smooth roadway to the extent possible, ensuring that the gutter-to-pavement transition remains relatively flat, and installing bicycle-friendly drainage grates. Pavement overlays can be used as a good opportunity to improve bicycle facilities. Considerations for bikeway repair and regular maintenance should be included in the maintenance management plan. Recognizing the critical

importance of effective maintenance in promoting walking and biking, the City should periodically inquire of users or in other ways ask for feedback or assess the effectiveness of its maintenance efforts. Particular attention should be paid to ensuring that the following happen as regularly as is feasible:

- Sidewalk maintenance
- Curb Ramp maintenance
- Sweeping
- Roadway surface repair .
- Review and correct Gutter-To-Pavement Transition
- Review and correct drainage grates
- Pavement Overlays
- Signage, striping and markings
- Maintenance Management Plan

The *Bicycle and Pedestrian Support Document* provides additional information about recommended street construction and repair, and maintenance and repair needs and guidelines.

IMPLEMENTATION

The Roseburg Bicycle and Pedestrian planning process provided the vision, projects, and programs to develop a bikeway and walkway network that can be used by all residents for all types of trips. Implementation will take place over many years. The following goals, objectives and action items are provided to guide the City of Roseburg, Douglas County, and ODOT toward the vision identified in this Plan.

Strategically pursue infrastructure projects

The recommended projects have been prioritized to determine projects that have the most identified need (through previous planning efforts and public support) and the highest ease of implementation. Strategically pursuing bicycle and pedestrian improvements in this way ensures that the City focuses its resources on the most critical projects and maximize impacts. In addition to long-standing bike and pedestrian requirements for new or upgraded collectors and arterials, recommended projects located on a corridor undergoing construction should look at bike and pedestrian considerations early in the process to coordinate to minimize costs, regardless of the prioritization level of the project.

Ensure that the Bicycle and Pedestrian Transportation Plan construction project and program list and Plan are current and relevant

The Roseburg Bicycle and Pedestrian Plan should be a living document that is kept up to date with the needs of current and potential pedestrians and bicyclists. This will ensure that the projects remain relevant and that the City can maximize the impacts. The Plan is recommended to be revisited every five years.

Policy 2.3 Review and update the Plan as needed, with a recommended review every five years.

Integrate Bicycle and Pedestrian Planning into Roseburg's day-to-day activities of planning, designing, funding, constructing and maintaining infrastructure

Regular maintenance of pedestrian and bicycle facilities will minimize the costs of system repairs. Gap in-fill and striping can be coordinated with other regular maintenance activities as well. To build an environment where bicycling is an accepted transportation mode, City policies and activities should be supportive.

Policy 3.1 Incorporate regular maintenance and repair of bicycle and pedestrian facilities into the Bicycle – Pedestrian Plan review process.

Policy 3.4 Adopt practice for resurfacing projects on arterial and collector roadways to stripe bicycle lanes or wide curb lane where practical.

Policy 3.5 Require above ground utilities/amenities to be located outside of sidewalk area and in furniture zone or buffer strips where practical.

Potential Complete Streets guidance is provided in the *Bicycle and Pedestrian Support Document*

Leverage city's development requirements to improve the biking and walking

As parts of Roseburg develop, it is important to require sidewalks and bikeways from the beginning of the planning process. This policy ensures that all new development is bicycle and pedestrian-accessible. System development charges (SDCs) can be used to fund bikeways and sidewalks. Those facilities should be built for new developments.

- Policy 4.1 Require sufficient right-of-way to be set aside for bicycle and pedestrian facilities during redevelopment.
- Policy 4.2 Ensure that appropriate bicycle and pedestrian facilities are built in new developments in accordance with the Transportation System Plan.
- Policy 4.3 Require evaluation of pedestrian and bicycle impacts in traffic impact analysis guidelines and plan review checklists.
- Policy 4.4 Establish thresholds for the number of driveways a parcel or land use is allowed.
- Policy 4.5 Establish incentives to reduce vehicle parking spaces in exchange for increase in high quality bicycle parking facilities or addition of locker and shower facilities.

Encourage private donors to support the Bicycle and Pedestrian system

Many trails have a “Friends of” group that can provide volunteer construction and maintenance services, as well as funding small project, such as signage and wayfinding programs.

- Policy 5.1 Re-start the “Adopt a Trail” program to encourage corporations, institutions and individual private donors to support the existing and proposed bicycle and pedestrian system.
- Policy 5.2 Leverage this program to enhance maintenance through volunteer work, and connect philanthropy with fundraising to sustain the system.
- Policy 5.3 Evaluate the opportunities for establishing a philanthropic giving program that can be used to support the construction and maintenance of Roseburg’s bicycle and pedestrian network.

Implement education, encouragement and enforcement activities

Augment the expanded bicycle and pedestrian network education, encouragement and enforcement activities to encourage people who would otherwise not walk or bicycle. These supporting programs are critical to the success of the Plan, and have been prioritized based on ease of implementation and cost.

- Policy 6.3 Work with schools, youth groups, and providers to provide education, and encouragement programs to Roseburg residents.
- Policy 6.4 Work with the Police Department, media, advocacy and safety groups to educate pedestrians, bicyclists, and drivers of rights, responsibilities and safe practices to share the transportation system comfortably and safely.
- Policy 6.5 Work with contractors and city construction workers to provide safe, convenient and accessible alternatives when construction interrupts existing facilities
- Policy 6.6 Encourage attended bicycle parking facilities at major entertainment and community events.

Policy 6.7 Work with the Police Department, Sheriff's Office, State Police, and local medical providers to ensure bicycle and pedestrian accidents are reported.

Policy 6.7 Adopt policies and support programs that offer incentives and promote bicycling and walking.

Integrate Land Use and Transportation.

For new and areas preparing for redevelopment, integrate transportation and land use to produce optimal designs which makes for efficient, effective, and bike and pedestrian friendly environment.

Policy 7.1 Establish Shared or "Woonerf" street standard and provisions for pedestrian/bicycle areas or streets.

Policy 7.2 Evaluate adopting level of service standards that consider all travel modes.

Policy 7.3 Establish standards for the design, location, installation, and/or maintenance of street furnishings and amenities such as benches, lighting, signing, bicycle racks, and artwork in the public right-of-way.

Policy 7.4 Establish requirements for planter or buffer strips, tree wells, and landscaping along public streets including design and maintenance standards.