



VOLUME I: Transportation System Plan

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City of Florence, Oregon

Transportation System Plan Update

Prepared for:

The City of Florence



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EXECUTIVE SUMMARY

The Florence Transportation System Plan (TSP) identifies the plans, policies, programs, and projects needed to address gaps, deficiencies, and needs within the city's transportation system over the next 20 years. The preferred plan consists of all projects identified throughout the TSP planning process while the cost constrained plan consists of projects the City anticipates being able to fund over the next 20 years¹. The amount of local funds available for capital projects in the TSP is estimated to be approximately \$10 million or roughly \$0.5 million per year.

The full cost of the preferred plan is approximately \$87.3 million over the 20-year period, including \$36.2 million in high priority projects, \$27.9 million in medium priority projects, and \$23.2 million in low priority projects. Based on the anticipated funds available for capital improvements, the cost constrained plan includes the high priority projects.² Although the projected funding based on current revenue sources does not cover the full cost of the high priority projects, the City plans to pursue additional funding to support the cost constrained plan.

Cost Constrained Plan

The following sections summarize the cost constrained plan projects. Additional information on these projects is provided throughout the TSP.

ROADWAY PLAN

The roadway plan includes projects to increase the efficiency of the transportation system. The cost constrained projects include a refinement plan for US 101, a streetscape plan for Bay Street, and several projects to improve intersections.

Table 1A. Cost Constrained Plan Projects – Roadway and Intersection Projects

Map ID	Location	Description	Priority	Cost (\$1,000)
Roadway Projects				
R1	US 101 (Refinement Plan)	Complete a refinement plan from Munsel Lake Road to the 21 st St to evaluate the potential to reconfigure of the roadway with a 3-lane cross section	High	\$150
R2	Bay Street (Streetscape Plan)	Complete a streetscape design plan from Kingwood Street to Nopal Street to evaluate the potential reconfiguration of the roadway	High	\$50

¹ The cost constrained plan does not limit the City or ODOT from advancing other projects in the TSP in response to changes in development patterns and funding opportunities that are not known at this time. There is no obligation to do these projects, nor assurance that these projects will be completed.

² The high priority projects include those that are most likely to be funded by the City over the 20-year planning horizon. The medium and low priority projects are aspirational and will be funded through grants and additional funding sources as they become available and/or by private developers as part of future development.

Intersection Projects				
R17¹	US 101/Munsel Lake Road	Reconfigure the intersection/modify the traffic control (e.g., traffic signal, roundabout) when warranted – cost estimate reflects a traffic signal	High	\$1,250
R21¹	US 101/OR 126	Restripe the eastbound and southbound approaches to maximize the available storage	High	\$50
R22¹	OR 126/Quince Street	Implement turning movement restrictions (right-in/right-out/left-in)	High	\$150
R24	9 th Street/Kingwood Street	Reconfigure the intersection to all-way stop-control when warranted	High	\$50
R26	35 th Street/Kingwood Street	Reconfigure the intersection to all-way stop-control when warranted	High	\$50
R27	35 th Street/Oak Street	Reconfigure the intersection to all-way stop-control when warranted	High	\$50
Total High Priority Cost				\$1,800

Note: The cost estimates do not include right-of-way acquisition or wetland mitigation due to the high variability depending on location, parcel sizes, and other characteristics. The cost estimates reflect the full cost of the projects, including costs likely to be funded by others, such as ODOT or private developers.

1. Project will require coordination with ODOT and approval from the State or Regional Traffic Engineer. Further evaluation will be required to determine the most appropriate form of traffic control.

TRAFFIC SAFETY PLAN

The traffic safety plan includes projects to increase visibility and driver awareness. The cost constrained projects include improvements at several intersections with a history of frequent and/or severe injury crashes, including ped/bike-related crashes.

Table 1B. Cost Constrained Plan Projects – Traffic Safety Projects

Map ID	Location	Description	Priority	Cost (\$1,000)
S2¹	US 101/Munsel Lake Road	Install advance intersection warning signs with flashing beacons and install intersection lighting	High	\$150
S5¹	US 101/OR 126	Increase visibility of traffic signal heads (larger bulbs, reflective backplates, etc.)	High	\$50
S6¹	US 101/Rhododendron Drive	Increase visibility of traffic signal heads (larger bulbs, reflective backplates, etc.)	High	\$50
S7¹	OR 126/Quince Street	Install street lighting and evaluate need for traffic control modification (Coordinate with Project R22)	High	\$100
S8	Rhododendron Drive/Heceta Beach Road	Install advance intersection warning signs on Heceta Beach Road; trim vegetation in SE and SW corners to increase sight distance; and install intersection lighting	High	\$150
S9	Kingwood Street/15 th Street	Install advance intersection warning signs on Kingwood Street and trim vegetation in SE corner to increase sight distance	High	\$100
S10	Kingwood Street/9 th Street	Install advance intersection warning signs on 9 th Street; install additional intersection lighting; and evaluate need for traffic control modification (Coordinate with Projects R24 and R25)	High	\$100
Total High Priority Cost				\$700

Note: The cost estimates do not include right-of-way acquisition or wetland mitigation due to the high variability depending on location, parcel sizes, and other characteristics. The cost estimates reflect the full cost of the projects, including costs likely to be funded by others, such as ODOT or private developers.

1. Project will require coordination with ODOT and approval from the State or Regional Traffic Engineer.

PEDESTRIAN PLAN

The pedestrian plan includes projects to improve access and circulation for people walking and using mobility devices. The cost constrained projects include new sidewalks, crosswalks, multi-use paths, and trails.

Table 1C. Cost Constrained Plan Projects – Pedestrian Projects

Map ID	Location	Description	Priority	Cost (\$1,000)
ODOT Streets				
P1	US 101 37 th St to UGB	Complete sidewalks on both sides of the street	High	\$3,090
P2	OR 126 US 101 to N Fork Road	Construct sidewalks on both sides of the street from Spruce Street to Tamarack Street and a multi-use path on the north side from Tamarack Street to N Fork Road	High	\$1,605
Lane County Streets				
P3	Heceta Beach Rd US 101 to Rhododendron Dr	Construct multi-use path on one side of the street with stormwater facility	High	\$2,750
P4	Munsel Lake Rd US 101 to Spruce St	Construct sidewalks with landscape strips on one side of the street and a multi-use path on the other side of the street	High	\$450
P5	Munsel Lake Rd Spruce St to Ocean Dunes Dr	Construct multi-use path on one side of the street (include landscape strip as feasible)	High	\$2,125
P6	Munsel Lake Rd Ocean Dunes Dr to N Fork Rd	Construct multi-use path on one side of the street (include landscape strip as feasible)	High	\$705
P7	N Fork Rd OR 126 to Munsel Lake Rd	Construct multi-use path on one side of the street (include landscape strip as feasible)	High	\$1,310
City Streets – Arterial				
P11	Rhododendron Dr 9 th St to Wild Winds St	Construct multi-use path on one side of the street (include landscape strip as feasible)	High	\$1,040
P12	Rhododendron Dr Wild Winds St to 35 th St	Construct multi-use path on one side of the street (include landscape strip as feasible)	High	\$1,295
P13	Rhododendron Dr 35 th St to Heceta Beach Rd	Construct multi-use path on one side of the street (include landscape strip as feasible)	High	\$3,730
City Streets – Collector				
P14	2nd St US 101 to Harbor St	Fill in sidewalk gaps on both sides of the street within Old Town	High	\$530
P18	35th St Rhododendron Dr to Kingwood St	Construct sidewalks on both sides of the street	High	\$1,105
P19	35th St Kingwood St to Oak St	Fill in sidewalk gaps on both sides of the street	High	\$505
P20	35th St	Fill in sidewalk gaps on both sides of the street	High	\$255

	Oak St to US 101			
P33	Oak St 27 th St to 35 th St	Construct sidewalk on the east side of the street	High	\$950
City Streets – Other Streets of Significance				
P43	Laurel St-Old Town Wy US 101 to Maple St	Fill in sidewalk gaps on both sides of the street	High	\$405
Total High Priority Cost				\$21,850

1. Project cost included in roadway system cost.

Table 1D. Cost Constrained Plan Projects – Pedestrian Crossing Projects

Map ID	Location	Description	Priority	Cost (\$1,000)
ODOT Streets				
C1¹	US 101	Install enhanced crossing treatments on US 101 at 46 th St and 42 nd /43 rd St	High	\$250
Lane County Streets				
C5	Munsel Lake Rd	Install enhanced crossing treatments on Munsel Lake Rd at Munsel Landing County Park and at Ocean Dunes Dr	High	\$50
City Streets				
C9	Oak St	Install enhanced crossing treatments at 35 th St, 27 th St, and 21 st St; install second crosswalk and school crosswalk signs at 30 th St	High	\$200
C12	Old Town	Install marked crosswalks with curb extensions on 2 nd St at Nopal St, Oak St, and Harbor St; install midblock crossings at Bay St and the boardwalk	High	\$250
Total High Priority Cost				\$750

Note: Further evaluation will be required to identify the type of enhanced crossing treatments needed at each crossing location.

1. Installation of enhanced crossing treatments will require approval by and coordination with ODOT.

Table 1E. Cost Constrained Plan Projects – Multi-use Path Projects

Map ID	Location	Description	Priority	Cost (\$1,000)
MU1	Munsel Creek Multi-use Path	Install and/or improve the segments of the Munsel Creek Trail between Quince Street and 16 th Street and between 25 th Street and 29 th Street. Between 16 th St and 25 th St, the path uses the existing West Park Drive, 18 th St, Willow Loop, 23 rd St, and Willow St roadway alignments (MU1-A). Extend the path from the Munsel Lake Greenway to Munsel Lake Road (MU1-B)	High	\$3,180
MU2	Estuary Trail	Install a multi-use path from the Boardwalk in Old Town to south end of Munsel Creek Trail	High	\$1,375
Total High Priority Cost				\$4,555

BICYCLE PLAN

The bicycle plan includes projects to improve access and circulation for people riding their bike. The cost constrained projects include new shared-lane pavement markings ("sharrows"), shoulder bikeways, on-street bike lanes, and buffered bike lanes.

Table 1F. Cost Constrained Plan Projects – Bicycle Projects

Map ID	Location	Description	Priority	Cost (\$1,000)
ODOT Streets				
B1	US 101 37 th St to UGB	Construct buffered bike lanes on both sides of the street (requires narrowing travel lanes) OR construct bike facilities consistent with US 101 Refinement Plan	High	\$360
B6	OR 126 US 101 to Tamarack St	Construct buffered bike lanes on both sides of the street (requires narrowing travel lanes)	High	\$65
Lane County Streets				
B8	Heceta Beach Rd US 101 to Rhododendron Dr	Construct shoulder bikeways on both sides of the street (coordinate with Project P3)	High	\$915
B9	Munsel Lake Rd US 101 to Spruce St	Construct bike lanes on both sides of the street (coordinate with Project P4)	High	\$65
B10	Munsel Lake Rd Spruce St to Ocean Dunes Dr	Construct shoulder bikeways on both sides of the street (coordinate with Project P5)	High	\$710
B11	Munsel Lake Rd Ocean Dunes Dr to N Fork Rd	Construct shoulder bikeways on both sides of the street (coordinate with Project P6)	High	\$235
B12	N Fork Rd OR 126 to Munsel Lake Rd	Construct shoulder bikeways on both sides of the street (coordinate with Project P7)	High	\$435
City Streets – Arterials				
B16	Rhododendron Dr 9 th St to Wild Winds St	Construct shoulder bikeways on both sides of the street (coordinate with Project P11)	High	\$345
B17	Rhododendron Dr Wild Winds St to 35 th St	Construct shoulder bikeways on both sides of the street (coordinate with Project P12)	High	\$430
B18	Rhododendron Dr 35 th St to Heceta Beach Rd	Construct shoulder bikeways on both sides of the street (coordinate with Project P13)	High	\$1,245
City Streets – Collectors				
B19	2nd St US 101 to Harbor St	Extend shared lane pavement markings from Maple St to US 101	High	\$5
B35	Maple St US 101 to Bay St	Add shared lane pavement markings	High	\$5
B36	Oak St 20 th St to 27 th St	Construct bike lanes from 20 th St to Siuslaw Middle School Dwy (requires removing on-street parking)	High	\$200
B39	Quince St 2 nd St to OR 126	Construct bike lanes on both sides of the street (requires removing on-street parking)	High	\$180
B41	Spruce St 42 nd St to 35 th St	Construct bike lanes on both sides of the street from 42 nd St to 37 th St (requires removing on-street parking)	High	\$210
B42	Spruce St 32 nd St to 17 th St	Construct bike lanes on both sides of the street from 25 th St to 17 th Street (requires removing on-street parking)	High	\$430

B43	Spruce St 17 th St to OR 126	Construct bike lanes on both sides of the street (requires removing on-street parking)	High	\$245
City Streets – Other Roads of Interest				
B46	Laurel St-Old Town Wy US 101 to Laurel St	Add shared lane pavement markings	High	\$5
B49	West Park Dr/18th St/Willow Lp/Willow St	Add shared lane pavement marking (coordinate with Project MU1)	High	\$15
Total High Priority Cost				\$6,100

1. Project cost included in roadway system cost.

TRANSIT PLAN

The transit plan includes projects to improve service for people taking the bus. The cost constrained projects include new service in the northern part of the City, new stop amenities, and additional information on available service.

Table 1G. Cost Constrained Plan Projects – Transit Projects

Map ID	Location	Description	Priority	Cost (\$1,000)
T1	Local Service	Add service to Rhododendron Dr and Heceta Beach neighborhood	High	0 ¹
T3	Marketing	Improve marketing for intercity service, specifically for Link Lane service to Eugene and to Yachats	High	\$50
T5	Bus Stops	Add shelters and/or benches to existing bus stops and build bus stops that are accessible	High	\$250
Total High Priority Cost				\$300

1. Project will be funded by others or in conjunction with others.

PARKING MANAGEMENT PLAN

The parking management plan includes projects to improve the efficiency of the parking system. The cost constrained projects include new wayfinding signs, on-street parking designations, and increased regulations in Old Town.

Table 1H. Cost Constrained Plan Projects – Parking Management Strategies

Map ID	Location	Description	Priority	Cost (\$1,000)
PM1	US 101, OR 126, and Quince St	Install wayfinding signs that direct motorists to off-street public parking facilities in Old Town	High	\$50
PM4	Old Town Area A	Stripe on-street parking stalls on both sides of all streets in Old Town Area A	High	\$50
PM5	Old Town Area A	Install signage on both sides of all streets in Old Town Area A to indicate time limitations (3-hours), hours of enforcement (8:00 AM to 5:00 PM), and directional arrows indicating the stalls where restrictions apply	High	\$50
Total High Priority Cost				\$150

1. Project will be self-funded, funded by others, or in conjunction with others.



CHAPTER 1. INTRODUCTION

Overview

The City of Florence (City), in conjunction with the Oregon Department of Transportation (ODOT), initiated an update of the urban area's Transportation System Plan (TSP) in 2021. This plan is intended to guide the management and implementation of the transportation facilities, policies, and programs, within the urban area over the next 20 years. This represents the vision of the City as it relates to the future of the transportation system while remaining consistent with state and other local plans and policies. The plan also provides the necessary elements for adoption by the governing bodies into the City's Comprehensive Plan.

State of Oregon planning rules require that the TSP be based on the current comprehensive plan land use map and must provide a transportation system that accommodates the expected 20-year growth in population and employment that will result from implementation of the land use plan. The contents of this TSP update are guided by Oregon Revised Statute (ORS) 197.712 and the Department of Land Conservation and Development (DLCD) administrative rule known as the Oregon Transportation Planning Rule (TPR). These laws and rules require that jurisdictions develop the following:

- » a road plan for a network of arterial and collector streets;
- » a bicycle and pedestrian plan;
- » an air, rail, water, and pipeline plan;
- » a transportation financing plan; and
- » policies and ordinances for implementing the TSP.

The TPR requires that the TSP incorporate the needs of all users and abilities. In addition, the TPR requires that local jurisdictions adopt land use and subdivision ordinance amendments to protect transportation facilities and to provide bicycle and pedestrian facilities between residential, commercial, and employment/institutional areas. It is further required that local communities coordinate their respective plans with the applicable county, regional, and state transportation plans.

TSP Process

The Florence TSP was updated through a process that identified transportation needs, analyzed potential options for addressing those needs over the next 20 years, and provided a financial assessment of funding and a prioritized implementation plan. The following steps were involved in this process:

- » Reviewing state, regional, and local transportation plans and policies that the Florence TSP must either comply with or be consistent with.
- » Gathering community input through working with a project advisory committee and a public workshop at key points in the project.
- » Establishing goals and objectives, identify and assess alternatives, and prioritize future needs.
- » Using a detailed inventory of existing transportation facilities and serve as a foundation to establish needs near- and long-term.
- » Identifying and evaluating future transportation needs to support the land use vision and economic vitality of the urban area.
- » Prioritizing improvements and strategies that are reflective of the community's vision and fiscal realities.
- » Preparing for review and adoption by local agencies, including the Florence City Council, Florence Planning Commissioners, and Lane County.

Public Involvement and Committees

The TSP update process provided residents the opportunity to share their respective visions for the future of the transportation system. Comments were gathered at three public open houses during the TSP development process. A project website was also maintained throughout the project that provided interested parties with the most recent documents available, information on upcoming meetings, and the ability to provide general comments to the project team. All of this input informed the development of the TSP goals and policies as well as the planned improvements.

The planning process was guided by a Stakeholder Transportation Advisory Committee (STAC). The STAC was comprised of a wide range of participants: local and state officials from key agencies including the City of Florence Planning and Public Works Departments, Lane County Transportation, Oregon Department of Transportation, Department of Land Conservation and Development, Siuslaw Valley Fire & Rescue, Lane Transit District, Siuslaw School District, and members of the Florence City Council, Planning Commission, Transportation Advisory Committee, and citizens.

Members of the STAC reviewed the technical aspects of the TSP. They held four meetings that focused on all aspects of the TSP development, including the evaluation of existing gaps and deficiencies, and forecast needs; the development of alternatives; the selection of preferred alternatives; the development of the draft TSP; and the review of implementing ordinances.

In addition to the STAC, the draft plans were discussed with the City Planning Commissions and City Council at work sessions and at public hearings.

Plan Area

This TSP covers publicly owned transportation facilities within the existing city urban growth boundary (UGB). Based on the TPR, the plan focuses on arterial and collector streets and their intersections, pedestrian and bicycle facilities along the arterial and collector streets and at other off-street locations, public transportation, and other transport facilities and services, including rail service, air service, pipelines and water service.

TSP Organization and Methodology

Development of the TSP began with the preparation of transportation goals and objectives to guide development of the TSP and the long-term vision for the transportation system. These goals and objectives are presented in Section 2 of this plan. Section 3 through 10 present the Roadway Plan, Pedestrian & Bicycle Plan, Transit Plan, and the Air, Rail, Water, and Pipeline Plans. These sections discuss the existing conditions and future needs of each system (where applicable), and any relative plan elements that have been included in the TSP.

Sections 1 through 10 comprise Volume I of the TSP and provide the main substance of the plan. These are supplemented by Technical Appendices in Volume II that contain the Technical Memoranda documenting the existing conditions analysis, forecast needs, and alternatives analysis that informed the TSP update.

This TSP update includes proposed improvements to non-City facilities. Without additional action by the governmental entity that owns the subject facility or land (i.e., Lane County or the State of Oregon), any project in this Plan that involves a non-City facility is merely a recommendation for connecting the pedestrian and bicycle network. As in most facility planning efforts, moving towards, and planning for, a well-connected network depends on the cooperation of multiple jurisdictions; the TSP is intended to facilitate discussions between the City and its governmental partners as they work together to achieve a well-connected network. The TSP does not, however, obligate its governmental partners to take any action or construct any projects.



CHAPTER 2. GOALS AND OBJECTIVES

The project team developed goals and objectives for the TSP update to help guide the review and documentation of existing and future transportation system needs, the development and evaluation of potential alternatives to address the needs, and the selection and prioritization of preferred alternatives for inclusion in the TSP update. The goals and objectives were also used to inform recommendations for policy language that will serve as guidance for future land use and transportation decision making. The goals and objectives will enable the City to plan for, and consistently work toward, achieving the community vision.

Goals and Objectives

The goals and objectives for the TSP update are described below. The goals provide direction for where the City would like to go, while the objectives provide a more detailed breakdown of the goals with specific outcomes the City desires to achieve. The goals and objectives are based on a review of the goals and objectives in the previous TSP, information from the ODOT TSP guidelines, and discussions with City staff about the important issues prevalent in the community and transportation system.

GOAL 1: CREATING A SAFE TRANSPORTATION SYSTEM FOR ALL

Prioritize the safe movement for all users and for all modes within the community along city, county, and state roadways. Minimize crashes and fatalities that occur on the transportation network.

- Objective 1A:* Address known safety issues at locations with a history of fatal or severe injury crashes.
- Objective 1B:* Provide safe pedestrian crossings on state highways and at additional locations off state highways.
- Objective 1C:* Support roadway improvements that provide safe access for all users, regardless of age, ability, or mode of transportation.

GOAL 2: BUILDING FACILITIES THAT SUPPORT ECONOMIC DEVELOPMENT & ARE COST-EFFECTIVE

Build transportation facilities that are suited for the community and its continued economic development. Transportation decisions should balance the needs of the summer peak period and the needs of the year-round population, where those may be in conflict.

- Objective 2A:* Provide convenient access for motor vehicles, transit, bicycles and pedestrians to major activity centers.
- Objective 2B:* Design streets, bikeways and walkways to meet the needs of pedestrians and cyclists to promote convenient circulation.
- Objective 2C:* Provide the efficient movement of goods, services, and people and maintain City minimum vehicular operating standards.
- Objective 2D:* Preserve the function of both US 101 and US 126 for regional traffic while building transportation connections between the City and these highways.
- Objective 2E:* Minimize negative impacts of vehicular traffic to existing and future neighborhoods, and to developable and developed commercial and industrial sites.
- Objective 2F:* Balance the City's strong tourism economy with the transportation related impacts from visitors.

GOAL 3: MEETING THE WIDE-RANGING TRANSPORTATION NEEDS OF ALL USERS

Build a transportation system that meets the needs of all users in Florence. Invest in non-automotive transportation modes to help people travel within Florence. Connect neighborhoods to major activity centers without needing to use an automobile.

- Objective 3A:* Create a non-motorized network that has a high degree of comfort (i.e. minimal Level of Traffic Stress).
- Objective 3B:* Close key gaps in the pedestrian or non-motorized system, creating short, easy, and accessible loops within the network.
- Objective 3C:* Provide pedestrian or non-motorized connectivity to schools, business districts, transit stops and corridors, and/or parks – including bicycle parking.
- Objective 3D:* Promote demand management programs (i.e. incentives to use non-automotive modes, parking management) to reduce single occupancy vehicle trips.
- Objective 3E:* Support comfortable and reliable transit service for transit stops and corridors, including (but not limited to) stop amenities, identifying a regional service hub, etc..

GOAL 4: MINIMIZING ENVIRONMENTAL IMPACTS

Support policies and programs that minimize pollution and reduce impacts to the environment and climate change. Recognize that transportation impacts are more likely to be felt negatively by historically marginalized communities.

- Objective 4A:* Minimize the impacts on natural and cultural resources when constructing transportation facilities.
- Objective 4B:* Set policies that encourage the use of low-emission transportation modes.

Objective 4C: Objective 4C: Select alternatives which balance the requirements of other goals with the need to minimize air, water, light, and noise pollution.

Objective 4D: Objective 4D: Construct transportation facilities that minimize impacts on natural resources such as streams, wetlands, and wildlife corridors.

GOAL 5: ADDING RESILIENCE TO THE NETWORK & PLANNING FOR EMERGENCIES

Create a transportation network that can quickly evacuate residents in the event of a major earthquake and/or tsunami and can build resilience within the community.

Objective 5A: Design and construct new transportation facilities that add resilience to the network.

Objective 5B: Locate new transportation facilities outside the tsunami inundation zones where feasible.

Objective 5C: Develop transportation facilities that both enhance community livability and serve as tsunami evacuation routes.

Objective 5D: Coordinate evacuation route and signage planning in conjunction with existing or proposed transportation system plan pedestrian and bicycle route planning efforts.

Objective 5E: Design streets to efficiently and safely accommodate emergency service vehicles.

GOAL 6: COORDINATING WITH LOCAL, REGIONAL, & STATE PARTNERS

Foster good relationships with public and private partners in the common interest of building the city's transportation network.

Objective 6A: Ensure consistency with local plans including the Comprehensive Plan, state plans, transit plans, and the plans of neighboring jurisdictions

Objective 6B: Ensure consistency with statewide planning documents such as the Transportation Planning Rule, Oregon Transportation Plan, Oregon Highway Plan, and ODOT modal plans

Objective 6C: Partner with local, county, and state agencies to invest in a transportation network that meets everyone's needs

Objective 6D: Meet the goals and policies laid out in the City's other planning efforts, including the Housing Implementation Plan Project

Project Selections and Prioritization

The selection and prioritization of projects included in the TSP update was determined based on the goals and objectives described above and application of the project evaluation criteria. See Tech Memo #2 and Tech Memo #6 in the Volume II Technical Appendix for additional information.



CHAPTER 3. ROADWAY SYSTEM

Roadway System

The roadway system within Florence serves a majority of trips across all travel modes. In addition to motor vehicles, pedestrians, bicyclists, transit riders, and others use the roadway system to travel throughout the city. The roadway system consists of two state highways (US 101 and OR 126), several Lane County streets, and numerous City of Florence streets.

ROADWAY SYSTEM NEEDS

Several roadway system needs were identified throughout the planning process. The needs reflect an inventory and evaluation of the roadway system, as well as input from the project team, project advisory committee, and the community. ODOT, Lane County, and the City of Florence all own and operate streets within the city and use different standards to determine the need for improvements. This can create challenges when there are overlapping operational, safety, and congestion issues, which intensify during the peak summer months. The following needs rose to the top throughout the planning process.

Disconnected Street Grid

The street network in Florence is on a grid system south of 9th Street and east of Kingwood Street, as well as along US 101 north toward approximately 37th Street. Outside of these two areas, the street network is not as connected, with several land uses (the Florence Municipal Airport, Florence Golf Links, existing sand dunes) that prevent a more connected street network. The only roads that connect Rhododendron Drive with US 101 are 9th Street, 35th Street, and Heceta Beach Road. This disconnected street network could hamper the city's ability to evacuate coastal residents during a potential Cascadia Subduction Zone event. On a more day-to-day basis, the disconnected street grid means that a large number of local motor vehicle trips are taken on a small handful of streets, including US 101.

Functional Classification Shortfalls

A roadway's functional classification determines its role in the transportation system, as well as its width, right-of-way dedications, driveway (access) spacing requirements, and types of pedestrian and bicycle facilities provided. There are a few streets in Florence (maintained either by the City or another jurisdiction) that are either not constructed to the functional classification standard (often missing walking or biking infrastructure) or

should likely have a higher classification level given the existing traffic and connections that the street provides.

Traffic Congestion

The traffic modeling for the TSP Update shows two intersections (US 101/Munsel Lake Road and Kingwood Street/35th Street) that exceed their mobility standard, and two additional intersections (US 101/35th Street and US 101/OR 126) have 95th percentile queues that exceed the available storage. Given the summer season volumes along the state highways, as well as the limited street connectivity that leads to local traffic utilizing these state highways, it is important to ensure that the roadway network is balanced to meet the needs of all users in Florence without building a system that is unsuitable during the off-peak seasons.

Traffic Safety

Traffic safety has a significant impact on how people use the transportation system, particularly in areas where real or perceived safety risks may prevent people from using more active travel modes, such as walking, biking, and taking transit. The most recent five years of complete crash data totaled 338 reported crashes in Florence. These included 2 fatal crashes, 15 serious injury crashes, 127 moderate or minor injury crashes, and 194 property damage only (PDO) crashes. The real or perceived safety risks may reflect the crash history of an area or the physical and/or operational characteristics of the roadways (winding curves, steep grades, high traffic volumes, high travel speeds, excessive heavy vehicles, etc.). Working to improve traffic safety for all roadway users is a top priority.

The roadway plan summarized below includes projects to increase the efficiency of the transportation system through changes in the functional classification and designation of roadways, improvements in major street connectivity, roadway capacity investments, and safety improvements.

JURISTICATION

Streets within Florence are owned and operated by three jurisdictions: ODOT, Lane County and the City of Florence. Each jurisdiction is responsible for determining the functional classification of the streets, defining major design and multimodal features, and approving construction and access permits. Coordination is required among the jurisdictions to ensure that the streets are planned, operated, maintained, and improved to safely meet public needs. Figure 1 illustrates the jurisdiction of streets within Florence. The following summarizes information on the ODOT, County, and City facilities within Florence.

ODOT Facilities

ODOT owns and operates two state highways within Florence: US 101 and OR 126. US 101 is the main north-south route through Florence and connects with OR 126 and other major City and County facilities. US 101 continues to the north and south along the Oregon coastline and connects Florence with Washington and California. OR 126 is the main east-west route to/from Florence and connects with US 101 and other major City and County facilities. OR 126 continues to the east along the Siuslaw River and connects Florence with OR 36 and the City of Eugene.

County Facilities

Lane County owns and operates a few major facilities within Florence, including:

- | | |
|---------------------------|---|
| » Heceta Beach Road | » Harbor Vista Road (within the campground) |
| » Munsel Lake Road | » N Jetty Road |
| » North Fork Siuslaw Road | |

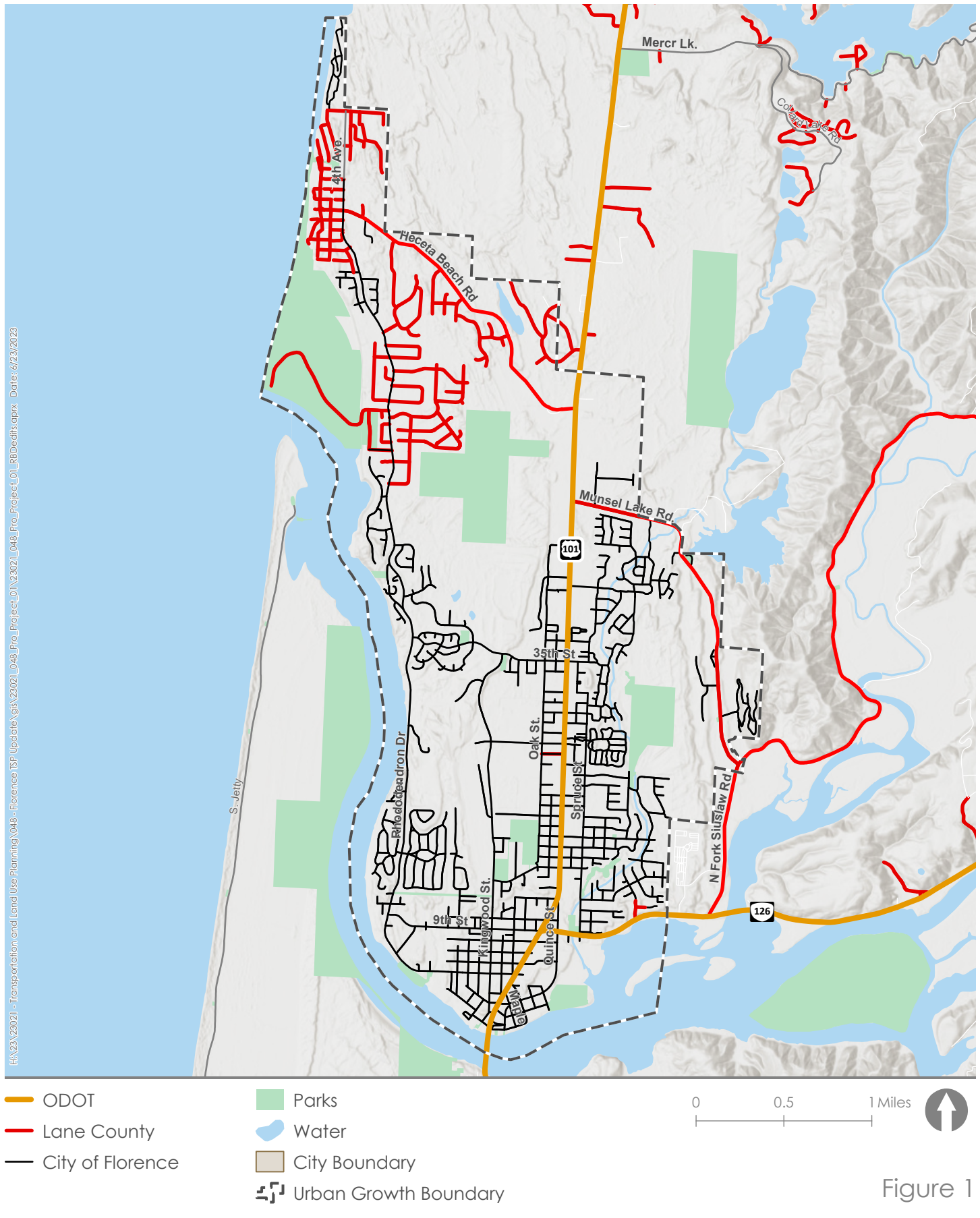


Figure 1

These roads either provide regional connections (In addition OR 126, Munsel Lake Road provides the only street connection between US 101 and N Fork Siuslaw Road) or provide access to government property (Siuslaw Valley Fire and Rescue, the US Coast Guard Station on the Siuslaw River, and Harbor Vista County Campground and Park).

City Facilities

The city owns and operates all other major facilities within Florence, including:

- | | | |
|---------------------------|---------------------------|----------------------|
| » 2 nd Street | » 30 th Street | » Maple Street |
| » 4 th Avenue | » 32 nd Street | » Kingwood Street |
| » 9 th Street | » 35 th Street | » Oak Street |
| » 15 th Street | » 42 nd Street | » Quince Street |
| » 20 th Street | » 43 rd Street | » Redwood Street |
| » 21 st Street | » 46 th Street | » Rhododendron Drive |
| » 27 th Street | » Bay Street | » Spruce Street |

FUNCTIONAL CLASSIFICATION PLAN

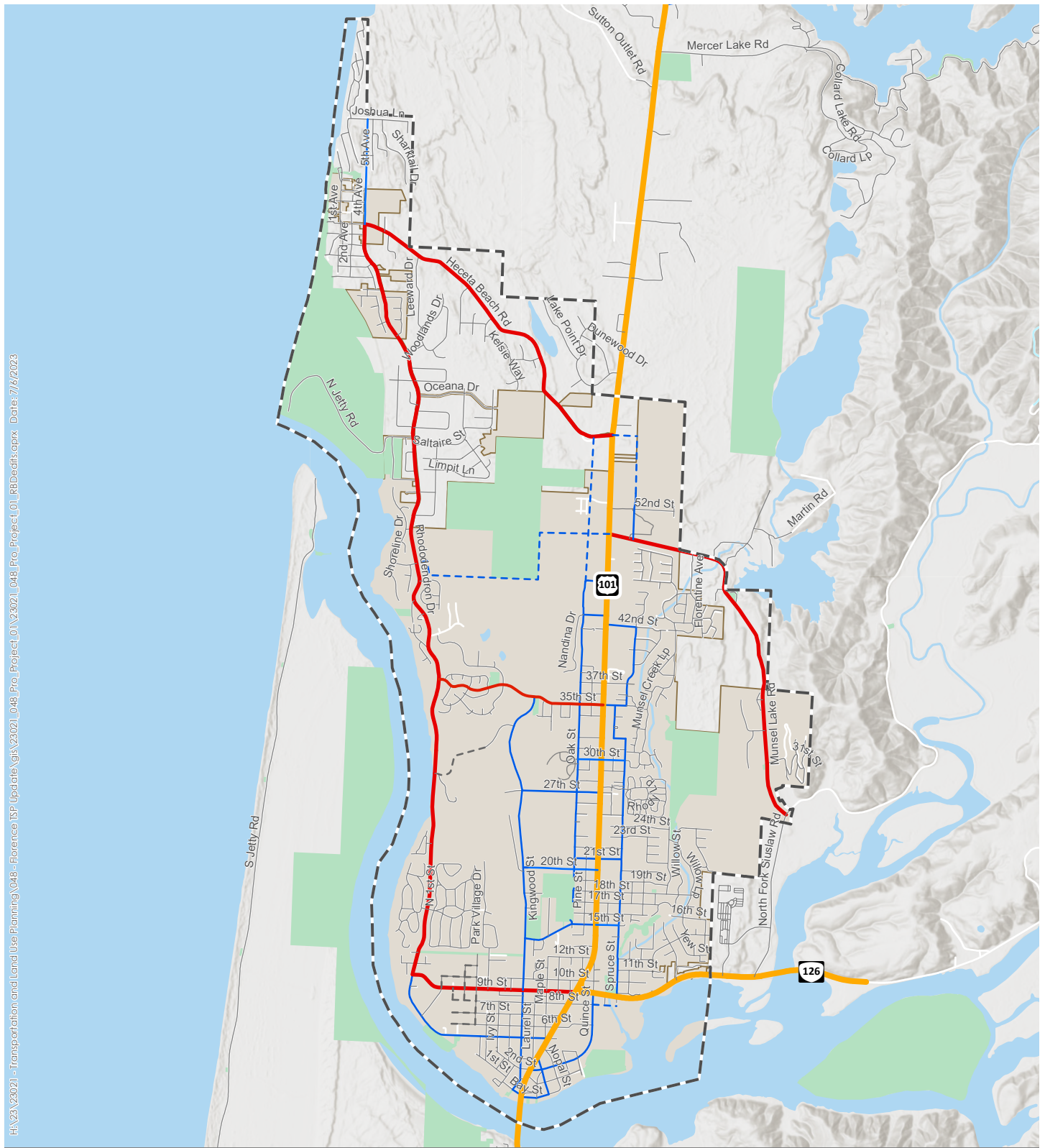
A street's functional classification determines its role in the transportation system, as well as its width, right-of-way dedications, driveway (access) spacing requirements, and types of pedestrian and bicycle facilities provided. Figure 2 illustrates the functional classification of streets within Florence. The functional classification is typically established by a local jurisdiction (city or county) based on the following hierarchy:

- » **Arterials** are intended to serve high volumes of traffic, particularly through traffic, at relatively high speeds. They also serve truck movements and typically emphasize traffic movement over local land access.
- » **Collectors** serve traffic from the local street system and distribute it to the arterial street system. These roadways provide a balance between traffic movement and land access and should be designed as best to facilitate traffic circulation throughout the City.
- » **Local Streets** provide land access and carry locally generated traffic at relatively low speeds to the collector street system. Local streets should provide connectivity through neighborhoods but should be designed to discourage cut-through vehicular traffic.

ODOT Highway Classification

ODOT has a separate classification system for its highways, which guides the planning, management, and investment for state highways. ODOT's categories, from highest to lowest, are Interstate, Statewide, Regional, and District highways. According to the Oregon Highway Plan (OHP), both US 101 and OR 126 are classified as Statewide Highways. The OHP defines Statewide Highways as follows:

- » **Statewide Highways** typically provide inter-urban and inter-regional mobility and provide connections to larger urban areas and recreation areas that are not directly served by Interstate Highways. A secondary function is to provide connections for intra-urban and intra-regional trips. The management objective is to provide safe, efficient, high-speed, continuous-flow operation. In constrained and urban areas, interruptions to flow should be minimal. Inside Special Transportation Areas, local access may also be a priority.



Roads

- Highway / Major Arterial
- Minor Arterial
- Collector
- Local Street
- - - Future Collector

- - - Future Local Street

- Parks
- Water
- City Boundary
- Urban Growth Boundary

0 0.5 1 Miles



Figure 2

Functional Classification Plan Florence, Oregon

Special Transportation Areas and Urban Business Areas

In addition to the functional classifications identified above, the segment of US 101 from 30th Street to OR 126 is designated as an Urban Business Area (UBA) and the segment of US 101 from OR 126 to Bay Street is designated as a Special Transportation Area (STA). According to the OHP:

- » An **Urban Business Area** (UBA) is a highway segment designation that may be applied to existing areas of commercial activity or future nodes or various types of centers of commercial activity within urban growth boundaries or urban unincorporated community boundaries on District, Regional or Statewide Highways where vehicular accessibility is important to continued economic viability.
- » A **Special Transportation Area** (STA) is a designated district of compact development located on a state highway within an urban growth boundary in which the need for appropriate local access outweighs the considerations of highway mobility except on designated OHP Freight Routes where through highway mobility has greater importance.

Table 2 summarizes the functional classifications of arterial and collector streets within Florence by jurisdiction.

Table 2. Functional Classification Plan (Arterials and Collector Streets)

Street	Segment	Classification
ODOT Streets		
US 101	North city limits to south city limits	Highway/Major Arterial
OR 126	US 101 to east city limits	Highway/Major Arterial
Lane County Streets		
4th Avenue	Falcon Street to Joshua Lane	Collector
Heceta Beach Road	Rhododendron Drive to US 101	Minor Arterial
Munsel Lake Road	US 101 to North Fork Road	Minor Arterial
North Fork Road	OR 126 to Munsel Lake Road	Minor Arterial
City Streets		
2nd Street	US 101 to Quince Street	Collector
4th Avenue	Heceta Beach Rd to Falcon Street	Collector
9th Street	Rhododendron Dr to US 101	Minor Arterial
15th Street	Oak St to Spruce Street	Collector
20th Street	Kingwood Street to US 101	Collector
21st Street	Oak St to Spruce St	Collector
27th Street	Kingwood St to US 101	Collector
30th Street	Oak St to Spruce St	Collector
32nd Street	Redwood St to Spruce St	Collector
35th Street	Rhododendron Dr to US 101	Minor Arterial
35th Street	US 101 to Spruce St	Collector
42nd Street	US 101 to Spruce St	Collector
43rd Street	Oak St to US 101	Collector
46th Street	Oak St to US 101	Collector
Airport Road	Kingwood St to Oak St	Collector
Bay Street	Kingwood St to Maple St	Collector
Kingwood Street	Bay St to 35 th Street	Collector
Maple Street	US 101 to Bay St	Collector

Oak Street	15 th St to 46 th St	Collector
Quince Street	2 nd St to US 101	Collector
Redwood Street	32 nd St to 35 th St	Collector
Rhododendron Drive	Heceta Beach Rd to 9 th Street	Minor Arterial
Rhododendron Drive	9 th St to US 101	Collector
Spruce Street	OR 126 to 32 nd St and 35 th St to 42 nd St	Collector

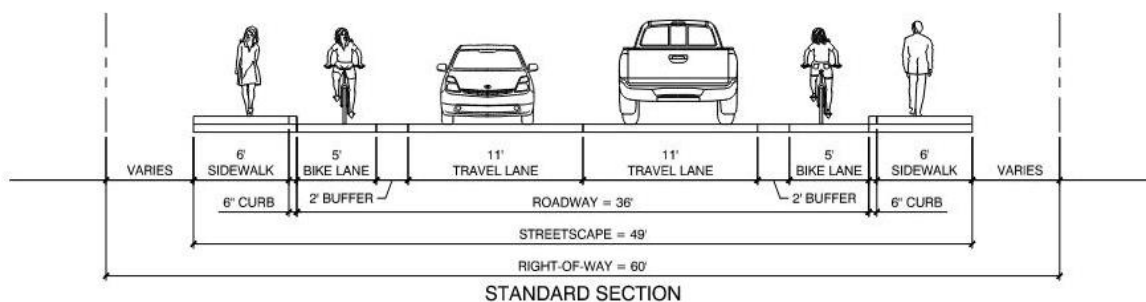
Several changes to the City's functional classification plan were made as part of the TSP update, each of which increases the classification of City roadways from local streets to collectors. The changes are intended to better align the classifications with roadway uses and to provide further arterial and collector connectivity within the built network. The City will coordinate with ODOT and Lane County to address discrepancies in the functional classification of roadways between jurisdictions following adoption of the TSP.

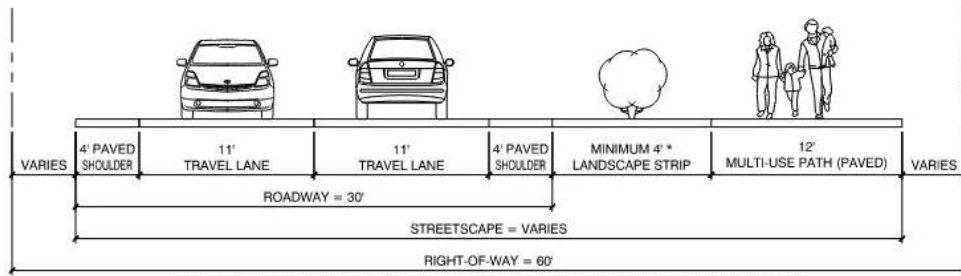
STREET CROSS SECTIONS

Street cross sections that reflect the unique characteristics of Florence are presented below. The design of a street can (and will) vary from street to street and segment to segment due to adjacent land uses and demand. The street cross sections are intended to define a system that allows standardization of key characteristics to provide consistency, but also to provide criteria for application that provides some flexibility while meeting the design standards. Exhibits 1 through 6 illustrate the street cross-section for each functional classification.

Unless prohibited by significant topographic or environmental constraint, newly constructed streets should meet the maximum standards indicated in the cross sections. When widening an existing street, the City may use lesser standards than the maximum to accommodate physical and existing development constraints where determined to be appropriate by the Public Works Director. In some locations "green streets" (those that utilize vegetation or pervious material to manage drainage) may be appropriate due to design limitations or adjacent land use.

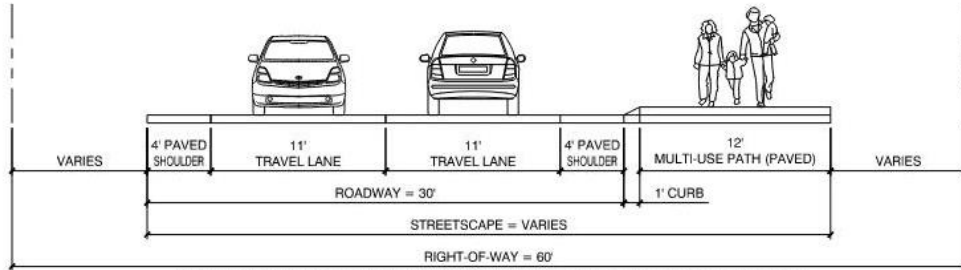
Exhibit 1. Minor Arterial Cross Sections





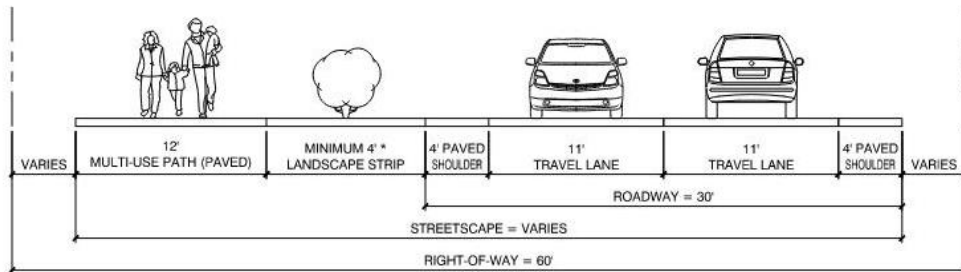
RHODODENDRON DRIVE: 9TH STREET TO HECETA BEACH ROAD **
(STANDARD SECTION WITH SEPARATED PATH)

* WHERE PHYSICAL SPACE DOES NOT ALLOW A 4' SEPARATION, A VERTICAL CURB, BARRIER, OR RAIL SHOULD BE USED TO SEPARATE MOTOR VEHICLE TRAFFIC AND THE MULTI-USE PATH AS SHOWN IN ALTERNATE SECTION BELOW.
** PER RHODODENDRON DRIVE INTEGRATED TRANSPORTATION PLAN (JAN 2008).



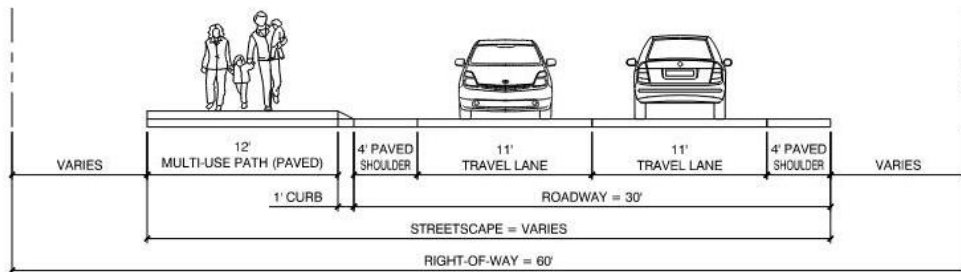
RHODODENDRON DRIVE: 9TH STREET TO HECETA BEACH ROAD *
(ALTERNATE SECTION WITH RAISED PATH)

* PER RHODODENDRON DRIVE INTEGRATED TRANSPORTATION PLAN (JAN 2008).



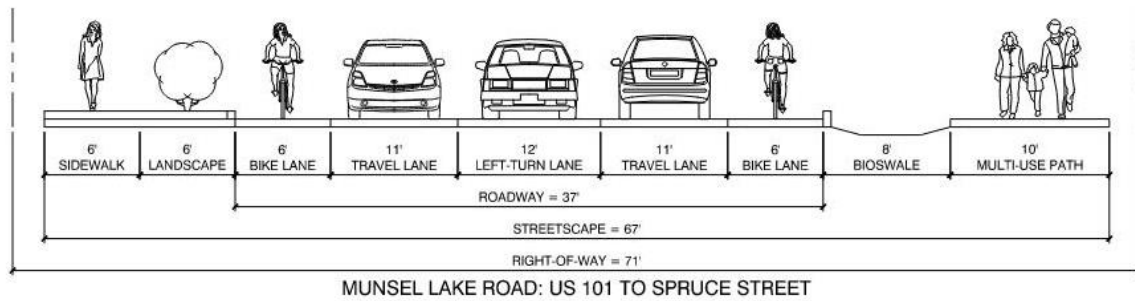
MUNSEL LAKE ROAD & HECETA BEACH ROAD
(STANDARD SECTION WITH SEPARATED PATH)

* WHERE PHYSICAL SPACE DOES NOT ALLOW A 4' SEPARATION, A VERTICAL CURB, BARRIER, OR RAIL SHOULD BE USED TO SEPARATE MOTOR VEHICLE TRAFFIC AND THE MULTI-USE PATH.



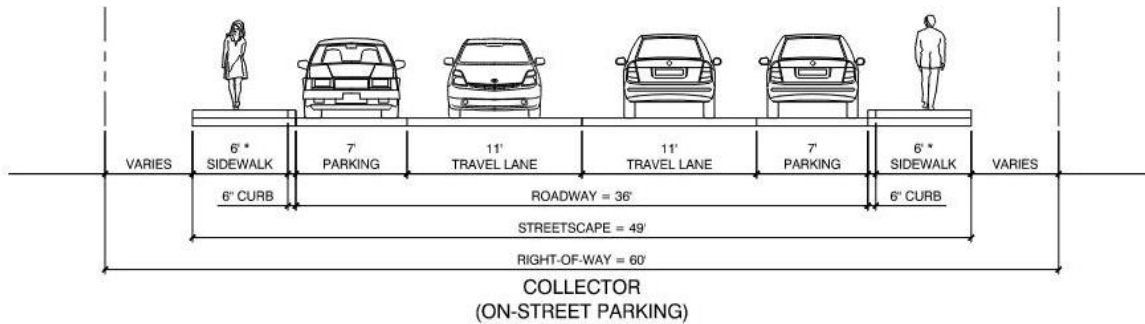
MUNSEL LAKE ROAD & HECETA BEACH ROAD *
(ALTERNATE SECTION WITH RAISED PATH)

* SLOPED CURB SAME AS FOR ALTERNATE SECTION ON RHODODENDRON DRIVE AND DOCUMENTED IN RHODODENDRON DRIVE TRANSPORTATION PLAN (JAN 2008).

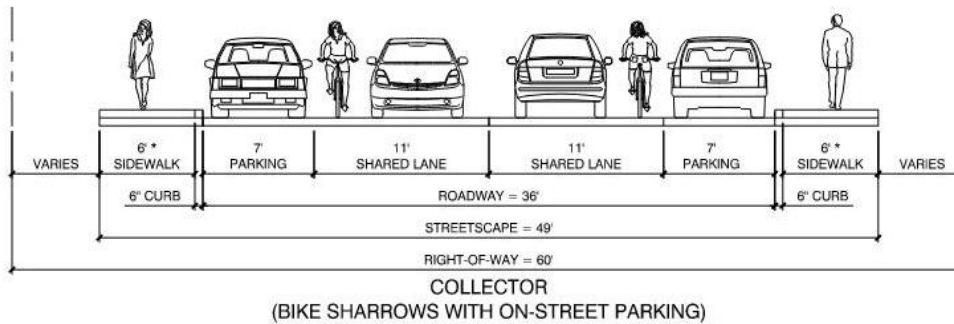


SOURCE: JRH TRANSPORTATION ENGINEERING 4/27/09.

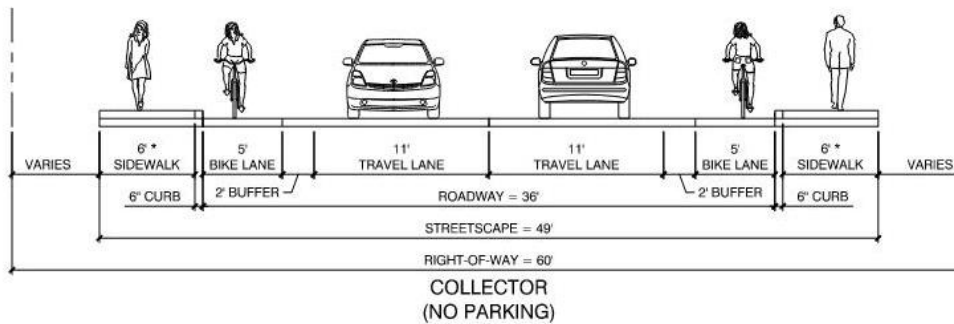
Exhibit 2. Collector Cross Sections



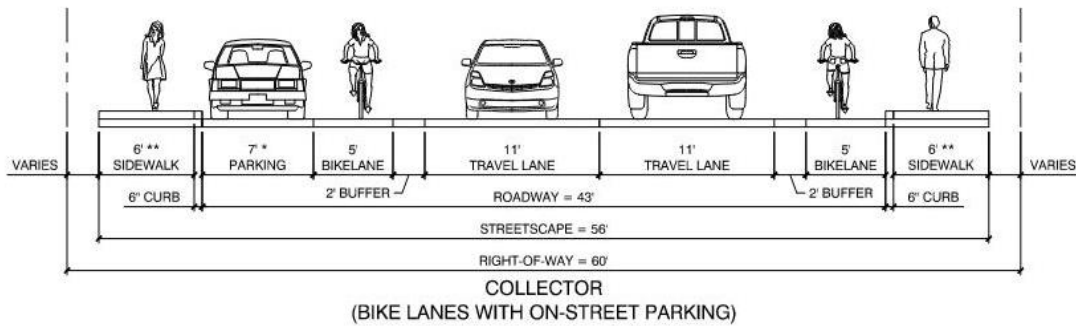
* ALL DOWNTOWN STREETS TO HAVE 8' SIDEWALKS WITH THE FOLLOWING EXCEPTIONS: COLLECTORS WITH 7 BIKE LANES AND NO ON-STREET PARKING MAY HAVE 6' SIDEWALKS AND COLLECTORS IN HIGH PEDESTRIAN TRAFFIC AREAS SHOULD HAVE 12' SIDEWALKS.



* ALL DOWNTOWN STREETS TO HAVE 8' SIDEWALKS WITH THE FOLLOWING EXCEPTIONS: COLLECTORS WITH 7 BIKE LANES AND NO ON-STREET PARKING MAY HAVE 6' SIDEWALKS AND COLLECTORS IN HIGH PEDESTRIAN TRAFFIC AREAS SHOULD HAVE 12' SIDEWALKS.



* ALL DOWNTOWN STREETS TO HAVE 8' SIDEWALKS WITH THE EXCEPTION OF COLLECTORS WITH NO ON-STREET PARKING AND HIGH TRAFFIC STREETS WHERE 6' AND 12' SIDEWALKS SHOULD BE INSTALLED, RESPECTIVELY.



* PARKING LOCATION MAY VARY AND IS TO BE DETERMINED BASED ON PHYSICAL AND BUILT ENVIRONMENT.
 ** ALL DOWNTOWN STREETS TO HAVE 8' SIDEWALKS WITH THE EXCEPTION OF COLLECTORS WITH NO ON-STREET PARKING AND HIGH TRAFFIC STREETS WHERE 6' AND 12' SIDEWALKS SHOULD BE INSTALLED, RESPECTIVELY.

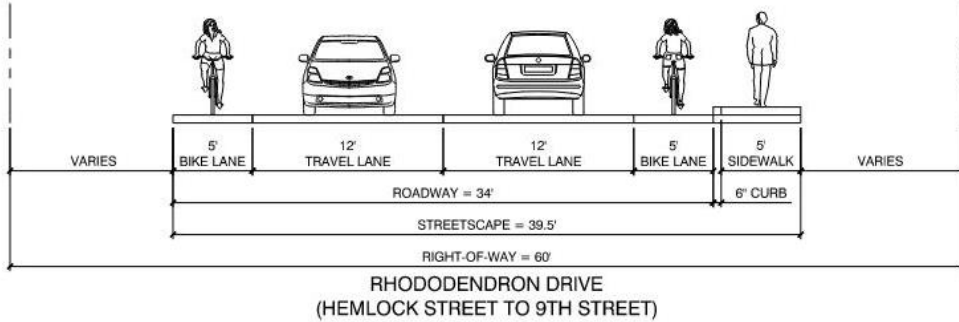
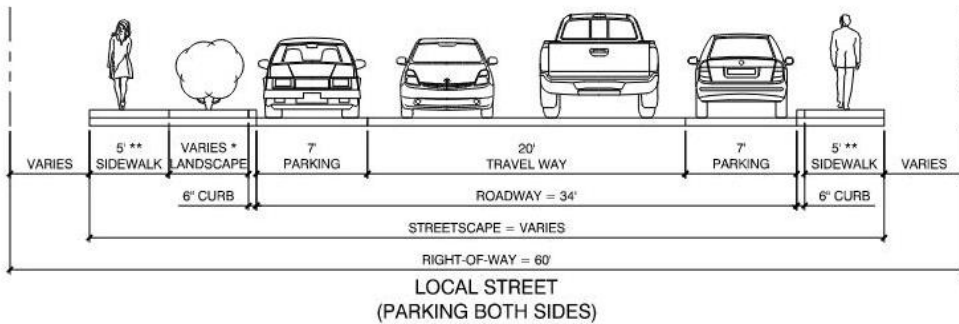
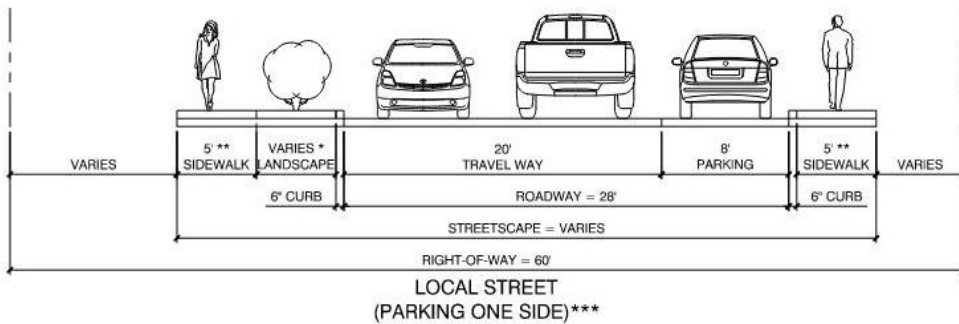


Exhibit 3. Local Street Cross Sections



* OPTIONAL LANDSCAPE WIDTH AND LOCATION MAY VARY AND IS TO BE DETERMINED BASED ON PHYSICAL AND BUILT ENVIRONMENT.
 ** ALL DOWNTOWN STREETS TO HAVE 8' SIDEWALKS WITH THE EXCEPTION OF COLLECTORS WITH NO ON-STREET PARKING AND HIGH TRAFFIC STREETS WHERE 6' AND 12' SIDEWALKS SHOULD BE INSTALLED, RESPECTIVELY.



* OPTIONAL LANDSCAPE WIDTH AND LOCATION MAY VARY AND IS TO BE DETERMINED BASED ON PHYSICAL AND BUILT ENVIRONMENT.
 ** ALL DOWNTOWN STREETS TO HAVE 8' SIDEWALKS WITH THE EXCEPTION OF COLLECTORS WITH NO ON-STREET PARKING AND HIGH TRAFFIC STREETS WHERE 6' AND 12' SIDEWALKS SHOULD BE INSTALLED, RESPECTIVELY.
 *** REQUIRES APPROVAL BY CITY ENGINEER.

MAJOR STREET CONNECTIVITY AND CAPACITY PLAN

The major street connectivity and capacity plan includes several new major street connections (arterials and collectors) that will enhance north-south and east-west connectivity within the city. The new connections reflect a review of existing major street connections as well as planned connections identified in the 2012 TSP. The future street system needs to balance the benefits of providing a well-connected roadway system with the connectivity challenges in the city due to existing constraints.

Table 3 identifies the major street connectivity and intersection capacity projects developed for the street system. The priorities shown in Table 3 are based on the project evaluation criteria as well as input from the project team; the priorities will be updated based on input from the advisory committee and the community. The cost estimates are based on average unit costs for similar street improvements in the northwest. Figure 3 illustrates the location of the major street connectivity and capacity plan projects.

Table 3. Major Street Connectivity and Capacity Plan Projects

Map ID	Location	Description	Priority	Cost (\$1,000)
Street Projects				
R1	US 101 (Refinement Plan)	Complete a refinement plan from Munsel Lake Road to the 21 st St to evaluate the potential to reconfigure of the roadway with a 3-lane cross section	High	\$150
R2	Bay Street (Streetscape Plan)	Complete a streetscape design plan from Kingwood Street to Nopal Street to evaluate the potential reconfiguration of the roadway	High	\$50
R3	Pacific View Drive	Extend the roadway from the southern terminus to Rhododendron Drive at New Hope Lane	Low	\$1,965
R4	Munsel Lake Road	Extend the roadway from US 101 to Oak Street (Coordinate with Project R17)	Medium	\$775
R5	Munsel Lake Road/46 th Street	Extend Munsel Lake Road OR 46 th Street from Oak Street to Rhododendron Drive – if 46 th Street is extended, the US 101/46 th Street intersection may need to be reconfigured	Low	\$5,460
R6	Oak Street	Extend the roadway from 46 th Street to Heceta Beach Road	Medium	\$4,805
R7	20 th Street	Extend the roadway from the western terminus to Kingwood Street – includes potential realignment with Airport Lane	Medium	\$320
R8	Spruce Street	Extend the roadway from the northern terminus to Heceta Beach Road	Low	\$1,905
R9	Spruce Street	Extend the roadway from OR 126 to the 8 th Street Extension	Medium	\$260
R10	8 th Street	Extend the roadway from Quince Street to the Spruce Street Extension – includes a bridge over Munsel Creek	Medium	\$1,260
R11	Heceta Beach Road	Extend the roadway from US 101 to Spruce Street (Coordinate with Project R16)	Low	\$835
R12	4 th Avenue	Upgrade the roadway from Heceta Beach Rd to Joshua Lane to Collector standard	Low	\$2,085
R13	20 th Street	Upgrade the roadway from Kingwood Street to US 101 to Collector standard	Medium	\$1,260

R14	Quince Street	Upgrade the roadway from OR 126 to US 101 to Collector standard	Low	\$420
R15	Xylo Street	Upgrade the roadway from Willow Ct to 12 th St	Medium	\$465
Intersection Projects				
R16¹	US 101/Heceta Beach Road	Reconfigure the intersection/modify the traffic control (e.g., traffic signal, roundabout) when warranted – cost estimate reflects a traffic signal	Medium	\$1,250
R17¹	US 101/Munsel Lake Road	Reconfigure the intersection/modify the traffic control (e.g., traffic signal, roundabout) when warranted – cost estimate reflects a traffic signal	High	\$1,250
R18¹	US 101/35 th Street	Restripe the eastbound approach to the intersection to maximize the available storage	Medium	\$50
R19¹	US 101/27 th Street	Reconfigure the intersection/modify the traffic control (e.g., traffic signal, roundabout) when warranted – cost estimate reflects a traffic signal	Medium	\$1,250
R20¹	US 101/15 th Street	Reconfigure the intersection/modify the traffic control (e.g., traffic signal, roundabout) when warranted – cost estimate reflects a traffic signal	Low	\$1,250
R21¹	US 101/OR 126	Restripe the eastbound and southbound approaches to maximize the available storage	High	\$50
R22¹	OR 126/Quince Street	Implement turning movement restrictions (right-in/right-out/left-in)	High	\$150
R23¹	OR 126/Spruce Street	Reconfigure the intersection/modify the traffic control (e.g., traffic signal, roundabout) when warranted – cost estimate reflects a traffic signal	Low	\$1,250
R24	9 th Street/Kingwood Street	Reconfigure the intersection to all-way stop-control when warranted	High	\$50
R25	9 th Street/Kingwood Street	Reconfigure the intersection as a mini-roundabout when warranted	Low	\$1,250
R26	35 th Street/Kingwood Street	Reconfigure the intersection to all-way stop-control when warranted	High	\$50
R27	35 th Street/Oak Street	Reconfigure the intersection to all-way stop-control when warranted	High	\$50
R28	Rhododendron Drive/Jetty Road	Install separate left- and/or right-turn lanes at the intersection	Low	\$250
Total High Priority Cost				\$1,800
Total Medium Priority Cost				\$11,695
Total Low Priority Cost				\$16,670
Total Cost				\$30,165

Note: The cost estimates do not include right-of-way acquisition or wetland mitigation due to the high variability depending on location, parcel sizes, and other characteristics. The cost estimates reflect the full cost of the projects, including costs likely to be funded by others, such as ODOT or private developers.

1. Project will require coordination with ODOT and approval from the State or Regional Traffic Engineer. Further evaluation will be required to determine the most appropriate form of traffic control.

Major Street and Intersection Policies

- » Florence shall develop a coordinated street network which facilitates the mobility and accessibility of community residents.
- » As city limits are expanded, Florence shall simultaneously annex land and the county roads found within, or bordering, the newly annexed land.

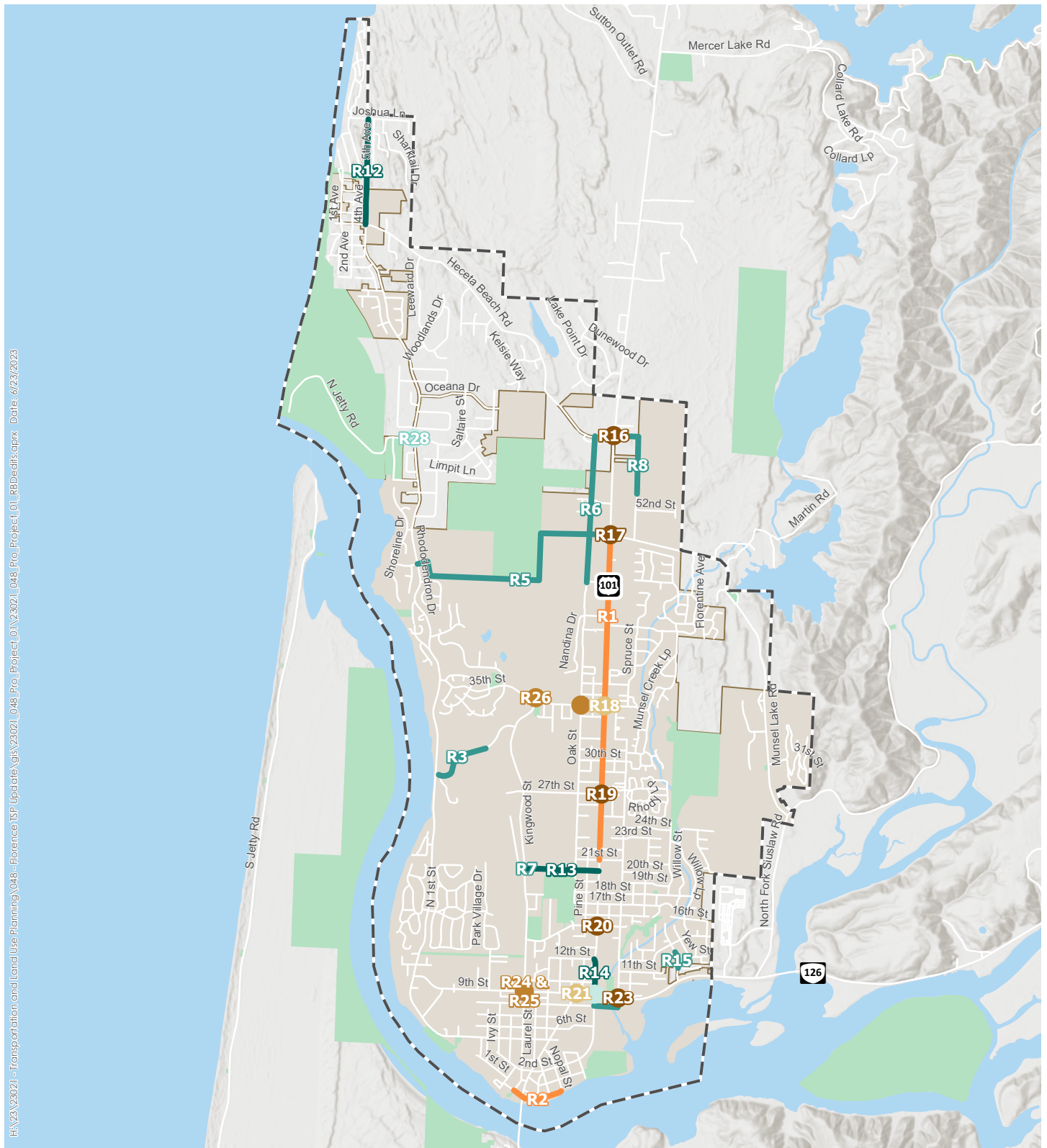
Lane County maintains the County road system, which exists largely outside of urban areas, to a rural standard. Traditionally, as city limits expand to encompass County road segments,

ownership of these road segments are transferred to the City, so the roads may be maintained to urban standards.

Local Street Connectivity

Several local street connections were identified as part of the 2012 TSP, including an extension of Pacific View Drive to connect with Rhododendron Drive and an extension of the street grid with anticipated development along 9th Street near Peace Health Medical Center. Figure 4 illustrates the location and general orientation of the local street connections. Roadway alignments and cost estimates are not provided as they are anticipated to be determined as part of future development. Any local street connections that are desired to be city-initiated projects should be identified as a high priority and included in the cost-constrained plan. Otherwise, the City will refer to the local street connections shown in Figure 4 during development review to ensure future development and redevelopment improve local street access and circulation within the city.

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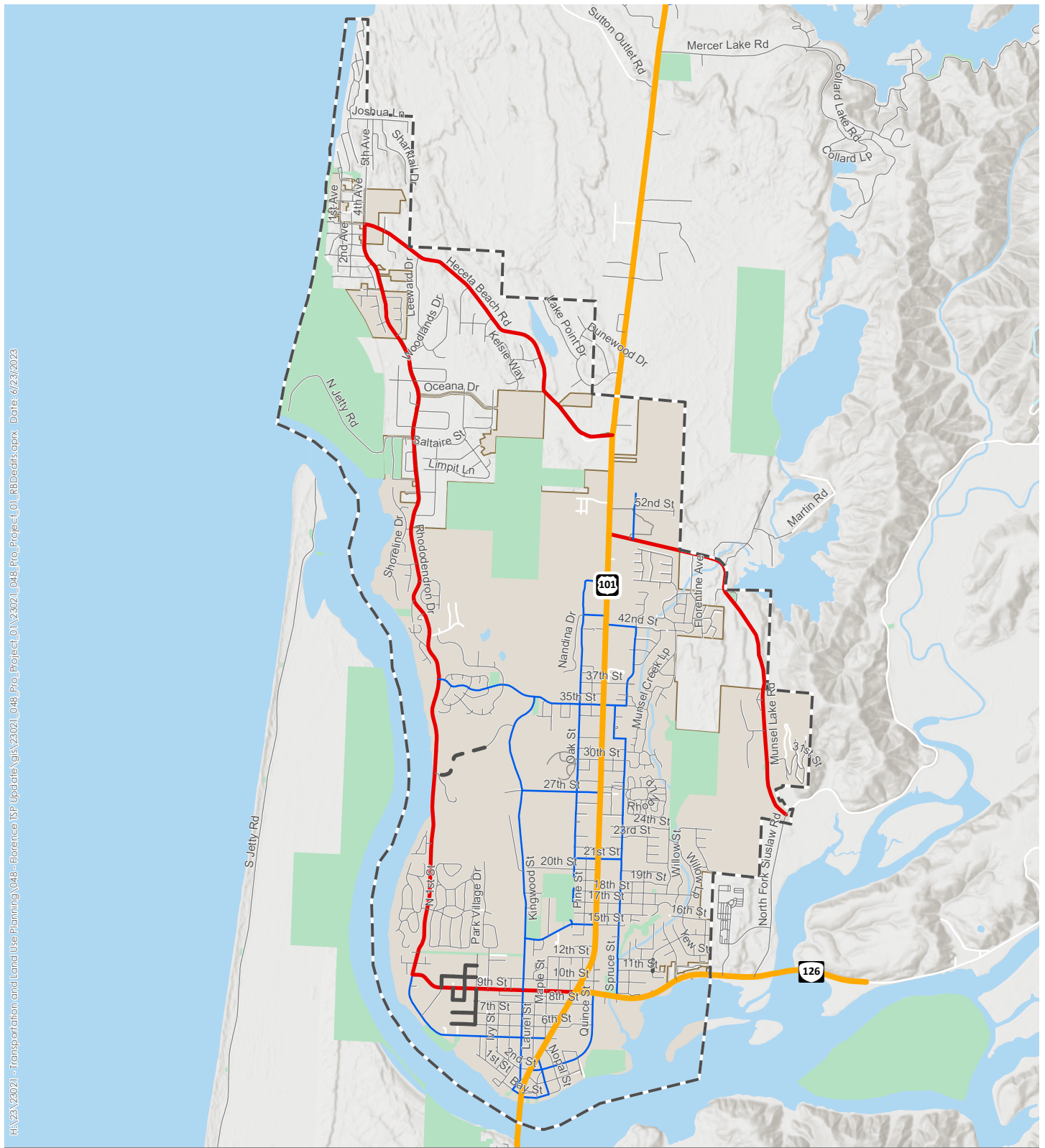


- Upgrade Classification
- Build Roadway
- Refinement/Streetscape Plan
- Reconfigure Intersection
- All-Way Stop Control
- Add Storage

- Turn Lane Changes
- Parks
- Water
- City Boundary
- Urban Growth Boundary



Figure 3



Roads

- Highway / Major Arterial
- Minor Arterial
- Collector
- Local Street

— Future Local Street

- Parks
- Water
- City Boundary
- Urban Growth Boundary

0 0.5 1 Miles



Figure 4

TRAFFIC SAFETY PLAN

Traffic safety has a significant impact on how people use the transportation system, particularly in areas where real or perceived safety risks may prevent people from using more active travel modes, such as walking, biking, and taking transit. Several of the traffic safety projects identified throughout the development of the TSP are addressed under the roadway, bicycle, and pedestrian system plans. These projects include roadway and intersection enhancements that address specific safety issues and new bike lanes, sidewalks, crosswalks, etc. that provide separation between travel modes. The traffic safety projects described below include those that are not addressed under other plans.

Traffic Safety Plan Projects

The traffic safety plan projects include enhancements at locations with a history of fatal and severe injury crashes as well as locations with high crash rates. Table 4 identifies the projects developed for the TSP to address traffic safety. The priorities shown in Table 4 are based on the project evaluation criteria as well as input from the project team; the priorities will be updated based on input from the advisory committee and the community. The cost estimates are based on average unit costs for similar roadway improvements in the northwest. Figure 5 illustrates the location of the traffic safety projects.

Table 4. Traffic Safety Plan

Map ID	Location	Description	Priority	Cost (\$1,000)
S1^{1,2}	US 101/Heceta Beach Road	Install advance intersection warning signs with flashing beacons; install southbound dynamic speed feedback sign after entering Florence; and install intersection lighting	Medium	\$250
S2¹	US 101/Munsel Lake Road	Install advance intersection warning signs with flashing beacons and install intersection lighting	High	\$150
S3¹	US 101/46 th Street	Install advance intersection warning signs with flashing beacons; install street name signs; install intersection lighting; and trim/remove vegetation	Medium	\$150
S4¹	US 101/12 th Street	Install street lighting and evaluate need for traffic control modification	Low	\$50
S5¹	US 101/OR 126	Increase visibility of traffic signal heads (larger bulbs, reflective backplates, etc.)	High	\$50
S6¹	US 101/Rhododendron Drive	Increase visibility of traffic signal heads (larger bulbs, reflective backplates, etc.)	High	\$50
S7¹	OR 126/Quince Street	Install street lighting and evaluate need for traffic control modification (Coordinate with Project R22)	High	\$100
S8	Rhododendron Drive/Heceta Beach Road	Install advance intersection warning signs on Heceta Beach Road; trim vegetation in SE and SW corners to increase sight distance; and install intersection lighting	High	\$150
S9	Kingwood Street/15 th Street	Install advance intersection warning signs on Kingwood Street and trim vegetation in SE corner to increase sight distance	High	\$100
S10	Kingwood Street/9 th Street	Install advance intersection warning signs on 9 th Street; install additional intersection lighting; and evaluate need for traffic control modification (Coordinate with Projects R24 and R25)	High	\$100
Total High Priority Cost				\$700
Total Medium Priority Cost				\$400

Total Low Priority Cost		\$50
Total Cost		\$1,150

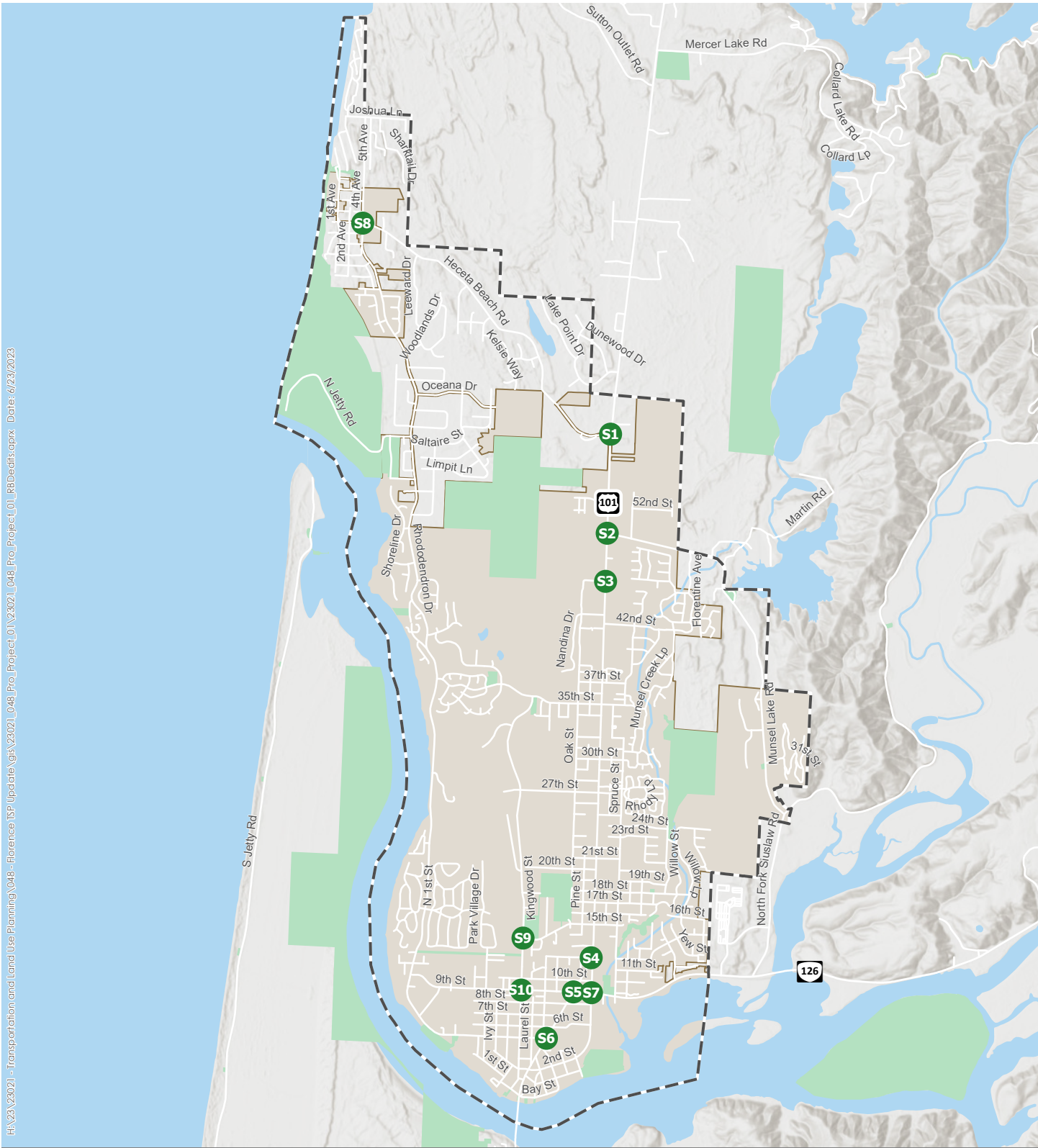
Note: The cost estimates do not include right-of-way acquisition or wetland mitigation due to the high variability depending on location, parcel sizes, and other characteristics. The cost estimates reflect the full cost of the projects, including costs likely to be funded by others, such as ODOT or private developers.

1. Project will require coordination with ODOT and approval from the State or Regional Traffic Engineer.
2. Speed feedback signs are considered enforcement tools, and the City will be expected to fund, operate, and maintain the speed feedback signed under an ODOT permit.

In addition to the Safety Alternatives projects identified in Table 4, several additional alternatives were considered along specific roadways:

- » US 101 and OR 126 – implement traffic calming/speed reduction treatments at the approach to major intersections.
- » Heceta Beach Road – implement traffic calming/speed reduction treatments from Rhododendron Drive to US 101.
- » Munsel Lake Road – implement traffic calming/speed reduction treatments from US 101 to N Fork Road.
- » N Fork Road – implement traffic calming/speed reduction treatments from US 101 to Munsel Lake Road.
- » Kingwood Street – implement traffic calming measures/speed reduction treatments from 20th Street to 35th Street.
- » Oak Street – implement traffic calming measures/speed reduction treatments from 35th Street to 46th Street.
- » 15th Street-Airport Road – implement traffic calming/speed reduction treatments from Kingwood Street to US 101.

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- Traffic Safety Alternatives
- Parks
- Water
- City Boundary
- Urban Growth Boundary



Figure 5

Traffic Safety Projects Florence, Oregon

Freight System

Freight plays a major role in Florence's transportation network. With two state highways that operate as freight routes, as well as several freight generators within the city, freight needs are broad and significant.

FREIGHT GENERATORS AND ROUTES

The OHP identifies all interstate highways and certain Statewide, Regional, and District Highways as freight routes. These routes are intended to facilitate efficient and reliable interstate, intrastate, and regional truck movement through a designated freight route system. The OHP identifies US 101 (south of OR 126) and OR 126 (east of US 101) as freight routes, as well as high clearance routes and reduction review routes in Florence.³

There are several freight generators within Florence, including:

- » **Port of Siuslaw:** The Port of Siuslaw, located off of 1st Street immediately to the east of Old Town Florence, is a publicly-chartered special district with commercial and sport boat moorages.
- » **Florence Municipal Airport:** The airport, which serves twin-engine aircraft and small jets, averages approximately 134 aircraft operations per week and is home to 25 aircraft.
- » **Florence Industrial Park:** The Florence Industrial Park, located off Pacific View Drive, is a partially developed industrial area currently owned by the Port of Siuslaw. Currently, there are two industrial businesses located there: a motor vehicle hydraulics and pump cylinders company, and a machine shop.
- » **Grocery stores (Safeway, Grocery Outlet, Bi-Mart, and Fred Meyer):** These four grocery stores are all located along US 101.

The Port of Siuslaw, located on Harbor Street, connects with Quince Street, a wide, two-lane road with approximately 20-foot lanes. Quince Street provides a direct connection to US 101 and OR 126, both of which are freight routes. Project B37 proposes adding bike lanes onto Quince Street, which will allow for modal separation from freight vehicles.

The Florence Municipal Airport is located off Kingwood Street, a two-lane road with approximately 12- to 14-foot lanes. To the south, Kingwood Street connects with 9th Street, providing access to US 101 and OR 126. To the north, Kingwood Street connects with 35th Street, providing access to US 101. The Florence Industrial Park, located on Pacific View Drive, is also located off of Kingwood Street.

The four grocery stores in Florence are all located along US 101. Only one of these stores, Safeway, is located along a portion of US 101 that is designated as a freight route. However, US-101 is a four- to five-lane facility that freight vehicles can navigate.

FREIGHT POLICIES

The freight policies, established from the *Florence Realization 2020 Comprehensive Plan* and through the planning process to create this TSP Update, are provided below:

³ Per OAR 731-012-0010, projects identified on reduction review routes must be reviewed for potential reductions in vertical and horizontal clearance and must include input from affected stakeholders and local governments.

- » Accommodate local freight traffic on Kingwood Street via 9th Street, 27th Street, and 35th Street.
- » Ensure that planned pedestrian and bicycle improvements on City streets with local freight traffic (Kingwood Street, 9th Street, 27th Street, 35th Street, Quince Street, and 2nd Street) are designed to allow for safe and distinct space for all modes.
- » Develop policies related to maintenance along designated freight routes to ensure the facilities do not become degraded over time.
- » Develop policies related to pedestrian and bicycle facilities along designated freight routes to ensure greater separation of travel modes.
- » Establish truck loading zones within the downtown area and develop policies related to the use of the truck loading zones, specifically for businesses on Bay Street.



CHAPTER 4. PEDESTRIAN SYSTEM

Pedestrian System

Pedestrian facilities in Florence consist of sidewalks, multi-use paths and trails, as well as marked and unmarked, signalized and unsignalized, pedestrian crossings. These facilities provide residents and visitors with the ability to travel between residential areas, schools, parks, churches, retail/commercial centers, and other major destinations within Florence (Old Town/Bay Street, Peace Health, and the Siuslaw Public Library, among others) by foot or mobility device.

PEDESTRIAN SYSTEM NEEDS

Inventory and public outreach indicate that the pedestrian system needs include filling gaps in the existing sidewalk network, adding new sidewalks, and adding safe crossing locations. US 101 and OR 126 are ODOT facilities while Heceta Beach Road, Munsel Lake Road, N Jetty Road, and N Fork Road are County facilities. The City of Florence will need to partner with these jurisdictions to implement the pedestrian system plans and policies identified below.

Incomplete Sidewalk Networks

There are several streets throughout the city with incomplete sidewalk networks which limit mobility for people walking or using a mobility device beyond a few blocks. The residential street grid south of 9th Street and west of US 101, located within walking distance of Old Town, has several streets with incomplete sidewalk networks, including Kingwood Street. Other streets outside of this area, such as Airport Road and Spruce Street just north of OR 126, are missing sidewalks for short sections. These incomplete sidewalk networks are especially challenging for older adults, a significant portion of Florence's population, to navigate on foot.

No Sidewalks

Several streets or small neighborhoods have no sidewalks. Neighborhoods west of Spruce Street and north of OR 126 have few streets with more than a sidewalk on one side. Other neighborhoods, including areas along 35th Street to the west of Kingwood Street, have no sidewalks. Major streets such as US 101 north of 37th Street, Rhododendron Drive north of 9th Street, Heceta Beach Road, and Munsel Lake Road have no sidewalks. Missing sidewalks on local neighborhood streets limit pedestrian mobility at a local level, and missing collector or arterial street sidewalks limit citywide pedestrian mobility.

Safe Crossing Locations

ODOT has invested in rectangular rapid flashing beacons (RRFBs) with pedestrian refuge islands at several locations along US 101 and OR 126. These treatments increase pedestrian visibility and allow pedestrians to cross one direction of traffic at a time. Safe crossing locations are limited along many other high-volume or high-speed roadways around the city, including US 101 near Fred Meyer, Rhododendron Drive near Exploding Whale Park, Oak Street near the city's public schools, and Spruce Street. Table 6 below identifies locations for enhanced crossing treatments (like RRFBs) to create safer pedestrian crossing conditions.

PEDESTRIAN SYSTEM PLAN

The pedestrian system plan consists of new sidewalks that fill gaps and provide new facilities along city streets, enhanced crossings that enable people to safely cross streets, and multi-use paths that augment and support the sidewalks. Collectively, these facilities will help enhance and expand the multimodal transportation system and encourage more people to walk.

Street Segment Projects

The types of pedestrian facilities included in the pedestrian system plan include:

- » **Sidewalks:** Sidewalks are the primary building block of the pedestrian system. They provide an important means of mobility for walkers as well as people with disabilities, families with strollers, and others who may not be able to travel on an unimproved surface. Ideally, sidewalks are provided on both sides of the street; however, some areas with physical or right-of-way constraints may require a sidewalk on one side only.
- » **Sidewalks with Landscape Strips:** Sidewalks with landscape strips (or on-street parking, on-street bike lanes, or other bicycle facilities) provide additional separation between people walking or using a mobility device and vehicles on the roadway. This treatment increases the comfort level for those using the sidewalk.
- » **Multi-Use Paths** (adjacent to the roadway network): Multi-use paths are facilities that serve pedestrians and bicyclists and can be constructed adjacent to roadways where topography, right-of-way, or other issues preclude construction of sidewalks and bike facilities. They may also be constructed away from the roadway within their own right-of-way. Multi-use paths can be used to create long distance links within and between communities and provide regional connections. They play an integral role in recreation, commuting, and accessibility due to their appeal to users of all ages and skill levels.
- » **Maintain Sidewalks:** On roadways where there is already a complete sidewalk network, maintenance is important to ensure that these sidewalk facilities remain usable in the future. Eroded concrete, buckled sidewalk, and tree root incursions are some ways that sidewalks could become degraded over time. Maintenance is especially important for people using a mobility device since they cannot easily step over a small area of degraded sidewalk.

Table 5 identifies the *street segment projects* developed for the pedestrian system plan. The priorities shown in Table 5 are based on the project evaluation criteria as well as input from the project team; the priorities will be updated based on input from the advisory committee and the community. The cost estimates are based on average unit costs for similar roadway improvements in the northwest. Figure 6 illustrates the location of the *street segment projects*.

Table 5. Street Segment Projects

Map ID	Location	Description	Priority	Cost (\$1,000)
ODOT Streets				
P1	US 101 37 th St to UGB	Complete sidewalks on both sides of the street	High	\$3,090
P2	OR 126 US 101 to N Fork Road	Construct sidewalks on both sides of the street from Spruce Street to Tamarack Street and a multi-use path on the north side from Tamarack Street to N Fork Road	High	\$1,605
Lane County Streets				
P3	Heceta Beach Rd US 101 to Rhododendron Dr	Construct multi-use path on one side of the street with stormwater facility	High	\$2,750
P4	Munsel Lake Rd US 101 to Spruce St	Construct sidewalks with landscape strips on one side of the street and a multi-use path on the other side of the street	High	\$450
P5	Munsel Lake Rd Spruce St to Ocean Dunes Dr	Construct multi-use path on one side of the street (include landscape strip as feasible)	High	\$2,125
P6	Munsel Lake Rd Ocean Dunes Dr to N Fork Rd	Construct multi-use path on one side of the street (include landscape strip as feasible)	High	\$705
P7	N Fork Rd OR 126 to Munsel Lake Rd	Construct multi-use path on one side of the street (include landscape strip as feasible)	High	\$1,310
P8	N Jetty Rd Rhododendron Dr to North Jetty Beach	Construct multi-use path on one side of the street (include landscape strip as feasible)	Medium	\$1,550
City Streets – Arterial				
P9	9th St US 101 to Rhododendron Dr	Maintain existing facilities	N/A	N/A
P10	Rhododendron Dr US 101 to Hemlock St	Maintain existing facilities	N/A	N/A
P11	Rhododendron Dr 9 th St to Wild Winds St	Construct multi-use path on one side of the street (include landscape strip as feasible) ²	High	\$1,040
P12	Rhododendron Dr Wild Winds St to 35 th St	Construct multi-use path on one side of the street (include landscape strip as feasible)	High	\$1,295
P13	Rhododendron Dr 35 th St to Heceta Beach Rd	Construct multi-use path on one side of the street (include landscape strip as feasible)	High	\$3,730
City Streets – Collector				
P14	2nd St US 101 to Harbor St	Fill in sidewalk gaps on both sides of the street within Old Town	High	\$530
P15	21st St Oak St to US 101	Maintain existing facilities	N/A	N/A
P16	21st St	Fill in sidewalk gaps on both sides of the street	Medium	\$255

	US 101 to Spruce St			
P17	27th St US 101 to Kingwood St	Fill in sidewalk gaps on both sides of the street between US 101 and Oak St	Medium	\$840
P18	35th St Rhododendron Dr to Kingwood St	Construct sidewalks on both sides of the street	High	\$1,105
P19	35th St Kingwood St to Oak St	Fill in sidewalk gaps on both sides of the street	High	\$505
P20	35th St Oak St to US 101	Fill in sidewalk gaps on both sides of the street	High	\$255
P21	35th St US 101 to Spruce St	Maintain existing facilities	N/A	N/A
P22	42nd St US 101 to Spruce St	Construct sidewalks on both sides of the street	Medium	\$325
P23	43rd St Oak St to US 101	Fill in sidewalk gaps on both sides of the street	Medium	\$245
P24	46th St Oak St to US 101	Maintain existing facilities	N/A	N/A
P25	Airport Rd/15th St Kingwood St to US 101	Fill in sidewalk gaps on both sides of the street	Medium	\$805
P26	Bay St Kingwood St to Nopal St	Reconstruct sidewalks to increase width (Coordinate with project R2)	Medium	\$550
P27	Kingwood St Bay St to 9 th St	Fill in sidewalk gaps on both sides of the street	Medium	\$1,090
P28	Kingwood St 9 th St to Airport Wy	Fill in sidewalk gaps on both sides of the street	Medium	\$560
P29	Kingwood St Airport Wy to 20 th St	Fill in sidewalk gaps on both sides of the street	Medium	\$720
P30	Kingwood St 20 th St to 35 th St	Reconstruct sidewalks with landscape strips OR implement traffic calming	Low	\$2,000
P31	Maple St US 101 to Bay St	Maintain existing facilities	N/A	N/A
P32	Oak St 20 th St to 27 th St	Maintain existing facilities	N/A	N/A
P33	Oak St 27 th St to 35 th St	Construct sidewalk on the east side of the street	High	\$950
P34	Oak St 35 th St to 46 th St	Reconstruct sidewalks with landscape strips OR implement traffic calming	Low	\$1,335
P35	Quince St 2 nd St to OR 126	Reconstruct and fill-in Sidewalks	Medium	\$365
P36	32nd-Redwood St Spruce St to 35 th St	Fill in sidewalk gaps on south and west side of the street	Medium	\$480
P37	Spruce St 42 nd St to 35 th St	Fill in sidewalk gaps on both sides of the street	Medium	\$875
P38	Spruce St 32 nd to 17 th St	Maintain existing facilities	N/A	N/A
P39	Spruce St	Fill sidewalks gaps on both sides of the street	Medium	\$1,005

	17 th St to OR 126			
P40	Spruce St Munsel Lake Rd to northern terminus	Construct sidewalks on the west side of the street	Low	\$495
City Streets – Other Streets of Significance				
P41	4th Ave Heceta Beach Rd to Joshua Ln	Construct sidewalks on both sides of the street (coordinate with Project R12)	Low	\$0 ¹
P42	20th St Kingwood St to US 101	Construct sidewalks on both sides of the street (coordinate with Project R13)	Medium	\$0 ¹
P43	Laurel St-Old Town Wy US 101 to Maple St	Fill in sidewalk gaps on both sides of the street	High	\$405
P44	30th St Oak St to US 101	Maintain existing facilities	N/A	N/A
P45	30th St US 101 to Spruce St	Maintain existing facilities	N/A	N/A
Total High Priority Cost				\$21,850
Total Medium Priority Cost				\$9,665
Total Low Priority Cost				\$3,830
Total Cost				\$35,345

1. Project cost included in roadway system cost.

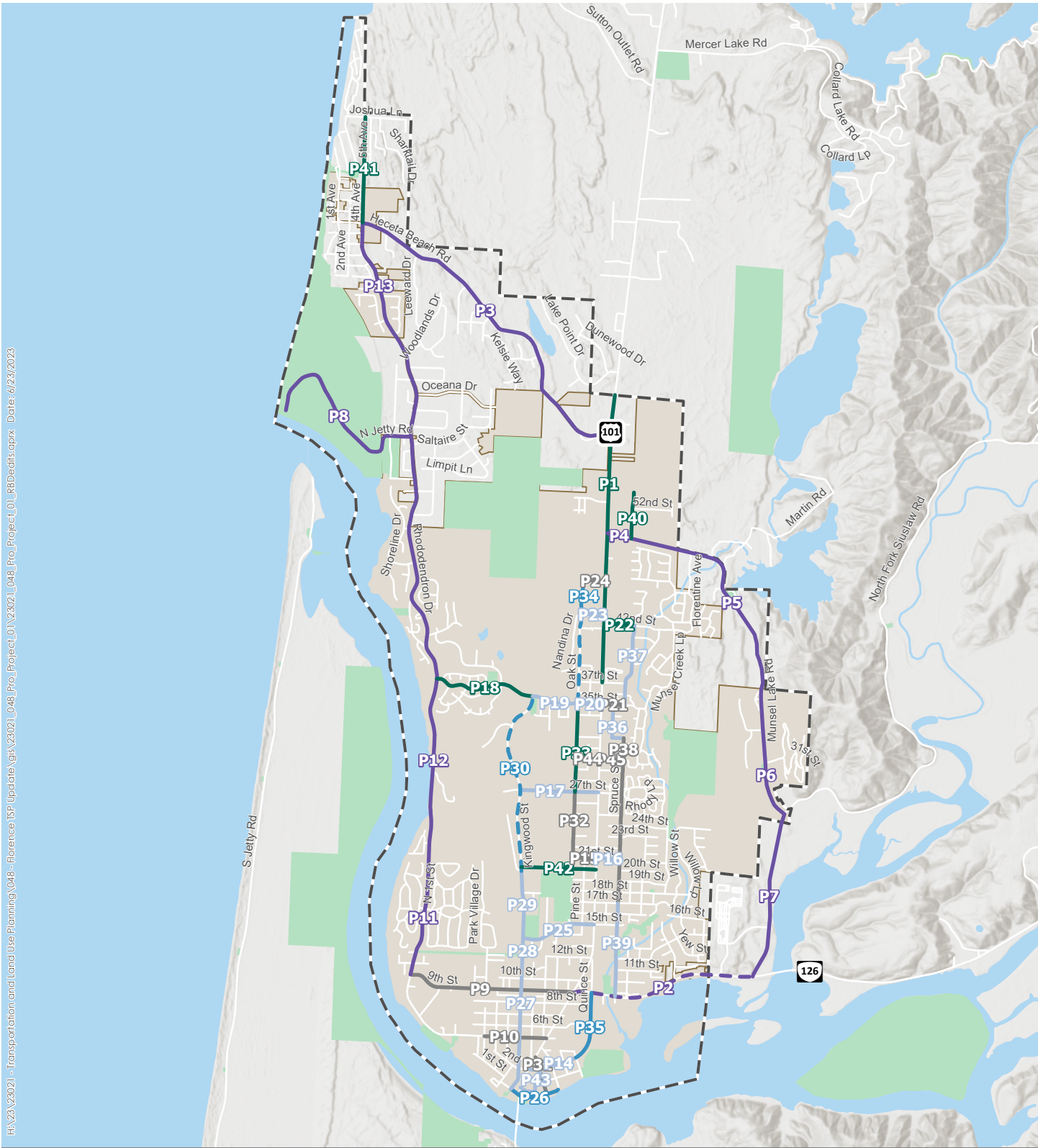
2. This project will require further evaluation and consideration of impacts to adjacent land uses.

Pedestrian Crossing Projects

The types of pedestrian facilities included in the pedestrian system plan include:

- » **Marked Crosswalks:** Crosswalks enable people to safely cross streets. Planning for appropriate crosswalks requires the community to balance vehicular mobility needs with providing crossing locations along the desired routes of pedestrians.
- » **Enhanced Crossing Treatments:** Enhanced crossing treatments provide additional elements at a street crossing location compared to a marked crosswalk. Enhanced crosswalk treatments include geometric features such as curb extensions and raised median islands with pedestrian refuges as well as signing and striping, flashing beacons, signals, countdown heads, and leading pedestrian intervals. Many of these treatments can be applied simultaneously to further alert drivers of the presence of pedestrians in the roadway.
- » **Leading Pedestrian Intervals:** At signalized intersections, pedestrians can be given a 3-7 second head start in entering the intersection before vehicles are given a green light. Functionally speaking, an all-red phase is established and pedestrians are given a walk sign to cross before vehicles are allowed to move. Leading pedestrian intervals, also known as LPIs, are designed to make pedestrians more visible to turning motorists as they cross the street at a signalized intersection. According to the National Association of City Transportation Officials, LPIs can reduce pedestrian-vehicle crashes at signalized intersections by as much as 60 percent.

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- Multi-Use Path
- Multi-Use Path and Sidewalks
- Build Sidewalks
- Reconstruct Sidewalks
- - - Reconstruct Sidewalks/Traffic Calming
- Fill Sidewalk Gaps

- Maintain Existing Facility
- Parks
- Water
- City Boundary
- - - Urban Growth Boundary



Figure 6

Pedestrian Plan Projects - Street Segments **Florence, Oregon**

Table 6 identifies the *pedestrian crossing projects* developed for the pedestrian system plan. The priorities shown in Table 6 are based on the project evaluation criteria as well as input from the project team; the priorities will be updated based on input from the advisory committee and the community. The cost estimates are based on average unit costs for similar roadway improvements in the northwest. Figure 7 illustrates the location of the *pedestrian crossing projects*.

Table 6. Pedestrian Crossing Projects

Map ID	Location	Description	Priority	Cost (\$1,000)
ODOT Streets				
C1¹	US 101	Install enhanced crossing treatments on US 101 at 46 th St and 42 nd /43 rd St	High	\$250
C2¹	US 101	Install enhanced crossing treatments on US 101 at 27 th St	Medium	\$250
C3¹	US 101	Install protected intersection treatments at all signalized intersections as feasible – include at future intersections if a signal is being constructed	Low	\$1,500
C4¹	US 101	Add leading pedestrian intervals on US 101 at 35 th St and 21 st St	Medium	\$50
Lane County Streets				
C5	Munsel Lake Rd	Install enhanced crossing treatments on Munsel Lake Rd at Munsel Landing County Park and at Ocean Dunes Dr	High	\$50
City Streets				
C6	9 th St	Install enhanced crossing treatments at existing crosswalks: Maple St, Kingwood St, and PeaceHealth access road	Medium	\$150
C7	Rhododendron Dr	Install enhanced crossings treatments on Rhododendron Dr at Kingwood St, Hemlock St, Greentrees Village, 35 th St, and Heceta Beach Rd	Medium	\$250
C8	Kingwood St	Install enhanced crossing treatments at Bay St, 27 th St, and 35 th St	Medium	\$100
C9	Oak St	Install enhanced crossing treatments at 35 th St, 27 th St, and 21 st St; install second crosswalk and school crosswalk signs at 30 th St	High	\$200
C10	Quince St	Install enhanced crossing treatments at the Florence Events Center access	Medium	\$50
C11	Spruce St	Install enhanced crossing treatments at multi-use path locations at 13 th St, 27 th St, and 29 th St	Medium	\$150
C12	Old Town	Install marked crosswalks with curb extensions on 2 nd St at Nopal St, Oak St, and Harbor St; install midblock crossings at Bay St and the boardwalk	High	\$250
Total High Priority Cost				\$750
Total Medium Priority Cost				\$1,000
Total Low Priority Cost				\$1,500
Total Cost				\$3,250

Note: Further evaluation will be required to identify the type of enhanced crossing treatments needed at each crossing location.

1. Installation of enhanced crossing treatments will require approval by and coordination with ODOT.

Multi-Use Path Projects

The types of pedestrian facilities included in the pedestrian system plan include:

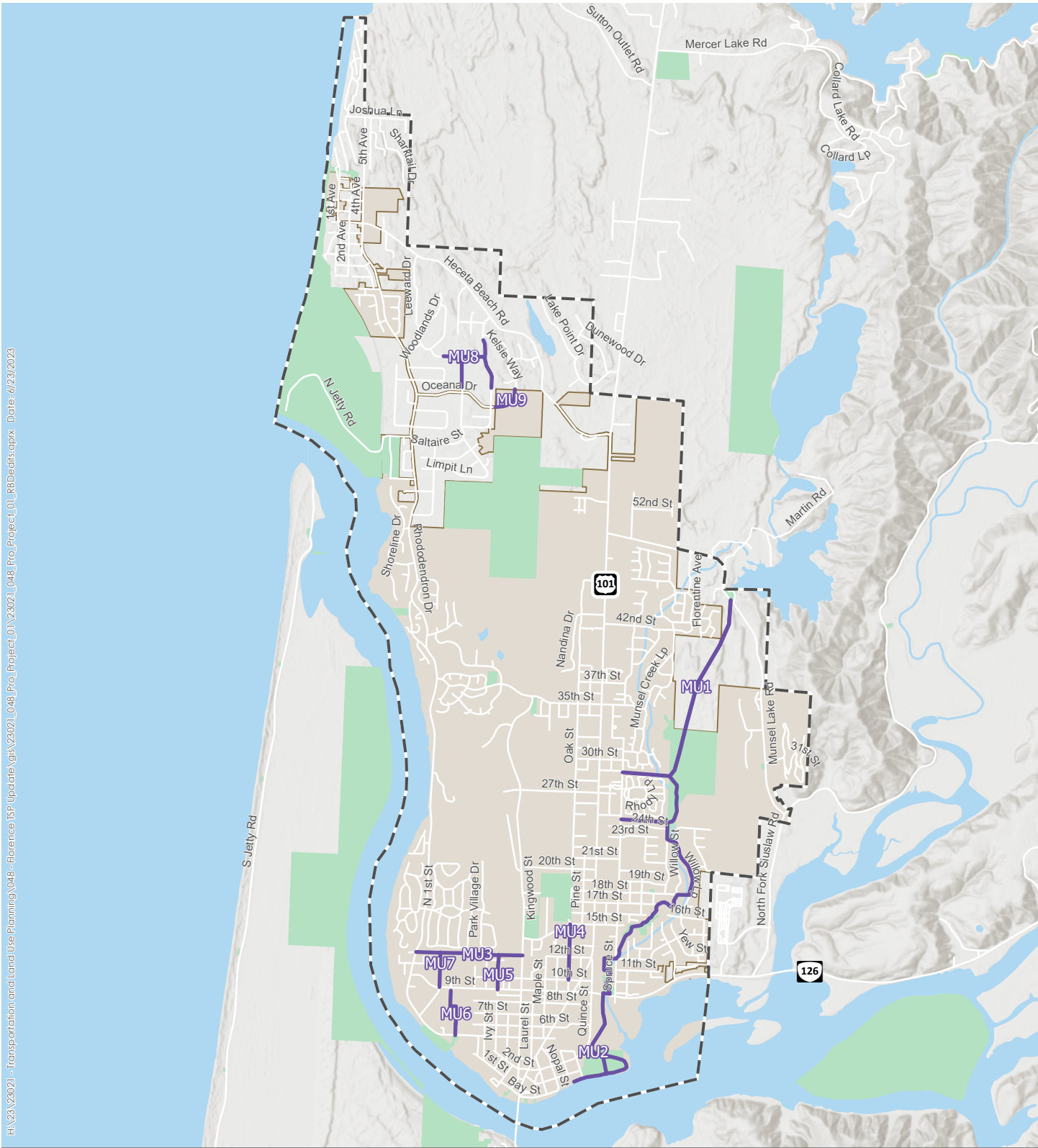
- » **Multi-use Paths:** In addition to multi-use paths that run adjacent to roadways, multi-use paths can be located outside of the right-of-way of the vehicular roadway network. Multi-use paths can be used to create long distance links within and between communities and provide regional connections. They play an integral role in recreation, commuting, and accessibility due to their appeal to users of all ages and skill levels. The City of Florence has several multi-use paths that provide off-street connections to various destinations.

Table 7 identifies the *multi-use projects* developed for the pedestrian system plan. The priorities shown in Table 7 are based on the project evaluation criteria as well as input from the project team; the priorities will be updated based on input from the advisory committee and the community. The cost estimates are based on average unit costs for similar roadway improvements in the northwest. Figure 8 illustrates the location of the *multi-use path projects*.

Table 7. Multi-Use Path Projects

Map ID	Location	Description	Priority	Cost (\$1,000)
MU1	Munsel Creek Multi-use Path	Install and/or improve the segments of the Munsel Creek Trail between Quince Street and 16th Street and between 25th Street and 29th Street. Between 16th St and 25th St, the path uses the existing West Park Drive, 18th St, Willow Loop, 23rd St, and Willow St roadway alignments (MU1-A). Extend the path from the Munsel Lake Greenway to Munsel Lake Road (MU1-B)	High	\$3,180
MU2	Estuary Trail	Install a multi-use path from the Boardwalk in Old Town to south end of Munsel Creek Trail	High	\$1,375
MU3	12th Street Multi-use Path	Install and/or improve the existing path between Kingwood Street and Rhododendron Drive	Medium	\$830
MU4	Oak Street Shared-use Path	Install a multi-use path from Oak Street at 15th Street to 10th Street	Medium	\$435
MU5	Ivy Street Multi-use Path	Install a multi-use path from 12th Street to 8th Street	Medium	\$265
MU6	Elm Street Multi-use Path	Install a multi-use path in the existing Elm Street right-of-way between 9th Street and Rhododendron Drive	Medium	\$365
MU7	Driftwood Street Multi-use Path	Install a multi-use path in the existing Driftwood Street right-of-way between 12th Street and 9th Street	Medium	\$265
MU8	North Florence County Park Multi-use Path	Install a network of multi-use paths within the County Park in the North Florence area	Low	\$940
MU9	Oceana Drive Multi-use Path	Install a multi-use path from the eastern terminus of Oceana Drive to the southern Terminus of Kelsie Way	Low	\$240
Total High Priority Cost				\$4,555
Total Medium Priority Cost				\$2,160
Total Low Priority Cost				\$1,180
Total Cost				\$7,895

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- Multi-Use Path Alternatives
- Parks
- Water
- City Boundary
- Urban Growth Boundary



Figure 8

**Pedestrian Plan Projects - Multi-Use Paths
Florence, Oregon**

PEDESTRIAN SYSTEM POLICIES

The pedestrian system policies are provided below:

- » The City will create a map (available on paper and electronically) showing safe walking routes.
- » The City will educate pedestrians about the rules of the road and provide information about state law as well as City Code.
- » The City will explore opportunities to further connect the multi-use path and trail system.
- » The City will systematically upgrade ADA facilities at intersections along major roadways.
- » The City will systematically upgrade sidewalks within Old Town to meet City standards.

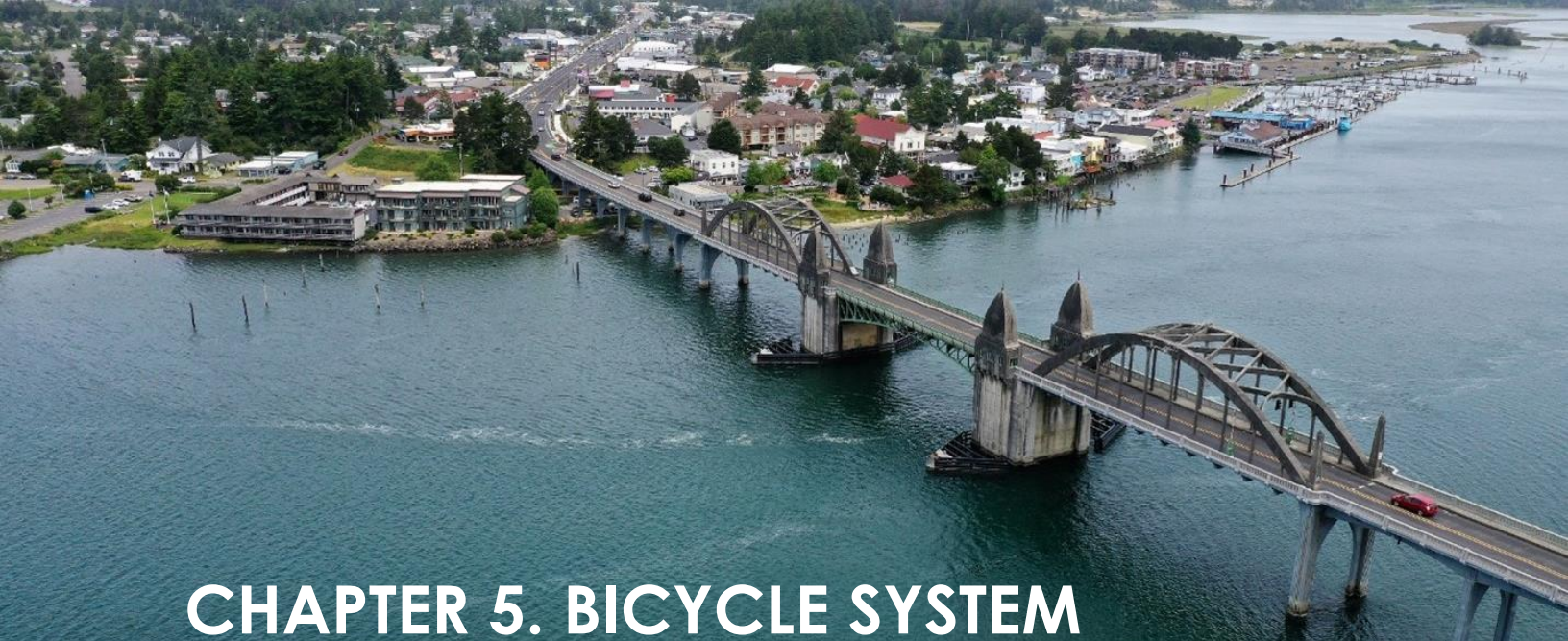
Safe Routes to School

Safe Routes to School (SRTS) plans make it safer for students to walk, bike, or take public transportation to school. Safer routes encourage more walking and biking and provide convenient and accessible options to and from school and in surrounding neighborhoods. SRTS programs include six components known as the Six E's: evaluation, education, encouragement, engineering, enforcement, and equity. The following summarizes several plans and policies the City can implement to support SRTS within the city.

SAFE ROUTES TO SCHOOL POLICIES

The Safe Routes to School policies are provided below:

- » Coordinate with the Siuslaw School District to develop SRTS plans for local schools.
- » Develop education programs that provide students with information on transportation options and the benefits of walking and biking to school.
- » Develop encouragement programs that generate excitement and interest in walking and biking through events and activities.
- » Continue to implement physical improvements to the transportation system aimed at making walking and biking to school safer, more comfortable and convenient.
- » Several alternatives are identified within the pedestrian and bicycle sections of this memorandum that could help the city further enhance the transportation system around schools.
- » Develop an evaluation program that assesses which strategies and approaches are successful.
- » Develop an equity program that ensures that program initiatives are benefiting all demographic groups.



CHAPTER 5. BICYCLE SYSTEM

Bicycle System

Bicycle facilities in Florence consist of on-street bike lanes, shared-lane pavement markings, multi-use paths, and bicycle parking. These facilities provide residents and visitors with the ability to travel between residential areas, schools, parks, churches, retail/commercial centers, and other major destinations within Florence (Old Town/Bay Street, Peace Health, and the Siuslaw Public Library, among others) by bike.

BICYCLE SYSTEM NEEDS

Inventory and public outreach indicate that the bicycle system needs include increasing the comfort of existing facilities and adding new facilities to streets that have no existing infrastructure. US 101 and OR 126 are ODOT facilities while Heceta Beach Road, Munsel Lake Road, N Jetty Road, and N Fork Road are County facilities. The City of Florence will need to partner with these jurisdictions to implement the bicycle system plans and policies identified below. Additionally, US 101 from the Siuslaw River Bridge to 9th Street and all of OR 126 is an Reduction Review Route, meaning that any changes to the roadway will need to be reviewed by ODOT's Mobility Advisory Committee, which reviews freight considerations on state roadways.

Improving Existing Bicycle Facilities

Bicycle Level of Traffic Stress (BLTS) measures the comfort of cycling on a given street. The existing bike lanes on US 101 and OR 126 have relatively high BLTS scores, which means they are suitable for some adults. Through public outreach, the City learned that some residents avoid cycling on US 101 because it is not comfortable. The City will need to work with ODOT to improve the bicycle facilities on these streets.

Adding New Bicycle Facilities

There are several arterial and collector streets within Florence that do not have bicycle facilities. These include Rhododendron Drive north of Wild Winds Street, Heceta Beach Road, Munsel Lake Road, and others. The lack of bicycle facilities on these streets limits mobility for people who live and work along these corridors. Adding new bicycle facilities will allow for safer and more comfortable bicycle travel.

BICYCLE SYSTEM PLAN

The bicycle system plan consists of new on-street bike lanes, buffered bike lanes, shoulder bike lanes, shared-lane pavement markings, and traffic calming. Collectively, these facilities will help enhance and expand the multimodal transportation system and encourage more people to bike.

The types of bicycle facilities included in the bicycle system plan include:

- » **On-Street Bike Lanes:** On-street bike lanes provide a dedicated space for the exclusive use of cyclists on the roadway surface. They are usually 5 to 6-feet wide and include an 8-inch stripe along the roadway and bike symbols at intersections. On-street bike lanes are typically placed at the outer edge of the roadway surface but to the inside of right-turn lanes and/or on-street parking. On-street bike lanes can improve the safety and security of cyclists and can provide direct connections between origins and destinations.
- » **Buffered Bike Lanes:** Buffered bike lanes are enhanced versions of on-street bike lanes that include an additional striped buffer of typically 2-3 feet between the bike lane and the vehicle travel lane and/or between the bike lane and the vehicle parking lane. They are typically located along streets that require a higher level of separation to improve bicyclist comfort.
- » **Shoulder Bike Lanes:** For streets that have an adjacent multi-use path, shoulder bike lanes remain an important component of the roadway cross-section. Shoulder bike lanes, which can be narrower than on-street bike lanes, provide space for bicyclists to use the road if they choose, as well as provide shoulder space for vehicles.
- » **Shared Lane Pavement Markings:** Shared lane pavement markings (often called "sharrows") are used to indicate a shared space for bicyclists and motorists. Sharrows are suitable on roadways with relatively low traffic volumes (<2,500 Average Daily Traffic) and low travel speeds (<25 MPH); however, they may also be used to transition between discontinuous bicycle facilities along roadways with higher volumes and speeds.
- » **Traffic Calming:** Traffic calming measures are designed to both slow traffic speeds and divert some traffic toward a higher classification roadway. Traffic calming treatments are divided into horizontal and vertical elements. Horizontal elements typically narrow the roadway or limit the distance that a motorist can see ahead. Treatments include curb extensions, median islands, traffic circles, chicanes, etc. Vertical elements are located within the travelway and are designed to slow travel speeds. Treatments include speed humps, speed cushions, speed tables, raised crosswalks, etc.
- » **Maintain Existing Infrastructure:** It is important for the City to maintain existing bicycle infrastructure as it adds other areas of its bicycle network. Clearing the bike lanes of debris also should not be overlooked as a maintenance task.

Table 8 identifies the projects developed for the bicycle system plan. The priorities shown in Table 8 are based on the project evaluation criteria as well as input from the project team; the priorities will be updated based on input from the advisory committee and the community. The cost estimates are based on average unit costs for similar roadway improvements in the northwest. Figure 9 illustrates the location of the bicycle system plan projects.

Table 8. Bicycle System Plan Projects

Map ID	Location	Description	Priority	Cost (\$1,000)
ODOT Streets				
B1	US 101 37 th St to UGB	Construct buffered bike lanes on both sides of the street (requires narrowing travel lanes) OR construct bike facilities consistent with US 101 Refinement Plan	High	\$360
B2	US 101 37 th St to 21 st St	Construct buffered bike lanes on both sides of the street (requires narrowing travel lanes) OR construct bike facilities consistent with US 101 Refinement Plan	Medium	\$205
B3	US 101 21 st St to Siuslaw River Bridge	Construct buffered bike lanes on both sides of the street (requires narrowing travel lanes)	Medium	\$345
B4	US 101 Siuslaw River Bridge	Provide flashing beacon lights to indicate when people are biking on the bridge and consider advisory speed signs when the flashing beacons are activated	Medium	\$80
B5	US 101 Siuslaw River Bridge	Coordinate with ODOT and the Oregon Coast Trail to build a separate bike and pedestrian bridge	Low	\$0 ²
B6	OR 126 US 101 to Tamarack St	Construct buffered bike lanes on both sides of the street (requires narrowing travel lanes)	High	\$65
B7	OR 126 Tamarack St to UGB	Maintain existing facilities	N/A	N/A
Lane County Streets				
B8	Heceta Beach Rd US 101 to Rhododendron Dr	Construct shoulder bikeways on both sides of the street (coordinate with Project P3)	High	\$915
B9	Munsel Lake Rd US 101 to Spruce St	Construct bike lanes on both sides of the street (coordinate with Project P4)	High	\$65
B10	Munsel Lake Rd Spruce St to Ocean Dunes Dr	Construct shoulder bikeways on both sides of the street (coordinate with Project P5)	High	\$710
B11	Munsel Lake Rd Ocean Dunes Dr to N Fork Rd	Construct shoulder bikeways on both sides of the street (coordinate with Project P6)	High	\$235
B12	N Fork Rd OR 126 to Munsel Lake Rd	Construct shoulder bikeways on both sides of the street (coordinate with Project P7)	High	\$435
B13	N Jetty Rd Rhododendron Dr to North Jetty Beach	Construct shoulder bikeways on both sides of the street (coordinate with Project P8)	Medium	\$515
City Streets – Arterials				
B14	9th St US 101 to Rhododendron Dr	Maintain existing facilities	N/A	N/A
B15	Rhododendron Dr US 101 to 9 th St	Maintain existing facilities	N/A	N/A

B16	Rhododendron Dr 9 th St to Wild Winds St	Construct shoulder bikeways on both sides of the street (coordinate with Project P11)	High	\$345
B17	Rhododendron Dr Wild Winds St to 35 th St	Construct shoulder bikeways on both sides of the street (coordinate with Project P12)	High	\$430
B18	Rhododendron Dr 35 th St to Heceta Beach Rd	Construct shoulder bikeways on both sides of the street (coordinate with Project P13)	High	\$1,245
City Streets – Collectors				
B19	2nd St US 101 to Harbor St	Extend shared lane pavement markings from Maple St to US 101	High	\$5
B20	21st St Oak St to US 101	Add shared lane pavement markings	Medium	\$5
B21	21st St US 101 to Spruce St	Add shared lane pavement markings	Medium	\$5
B22	27th St US 101 to Kingwood St	Construct bike lanes from Oak St to US 101	Medium	\$205
B23	35th St Rhododendron Dr to Kingwood St	Maintain existing facilities	N/A	N/A
B24	35th St Kingwood St to Oak St	Maintain existing facilities	N/A	N/A
B25	35th St Oak St to US 101	Maintain existing facilities	N/A	N/A
B26	35th St US 101 to Spruce St	Maintain existing facilities	N/A	N/A
B27	42nd St US 101 to Spruce St	Add shared lane pavement markings from Spruce to eastern terminus and create bike connection between the eastern terminus and Munsel Creek Lp	Medium	\$5
B28	43rd St Oak St to US 101	Add shared lane pavement markings	Medium	\$5
B29	46th St Oak St to US 101	Maintain existing facilities	N/A	N/A
B30	Airport Rd/15th St Kingwood St to US 101	Add shared lane pavement markings	Medium	\$10
B31	Bay St Kingwood St to Maple St	Add shared lane pavement markings	Medium	\$5
B32	Kingwood St Bay St to 9 th St	Construct bike lanes on both sides of the street (requires removing on-street parking) OR implement traffic calming measures	Medium	\$265
B33	Kingwood St 9 th St to Airport Wy	Construct bike lanes on both sides of the street from 9 th St to 10 th St (will require removing on-street parking) OR implement traffic calming measures	Medium	\$135
B34	Kingwood St Airport Wy to 35 th St	Construct buffered bike lanes on both sides of the street (requires narrowing travel lanes) OR implement traffic calming measures	Medium	\$215

B35	Maple St US 101 to Bay St	Add shared lane pavement markings	High	\$5
B36	Oak St 20 th St to 27 th St	Construct bike lanes from 20 th St to Siuslaw Middle School Dwy (requires removing on-street parking)	High	\$200
B37	Oak St 27 th St to 35 th St	Maintain existing facilities	N/A	N/A
B38	Oak St 35 th St to 46 th St	Maintain existing facilities	N/A	N/A
B39	Quince St 2 nd St to OR 126	Construct bike lanes on both sides of the street (requires removing on-street parking)	High	\$180
B40	32nd-Redwood St Spruce St to 35 th St	Maintain existing facilities	N/A	N/A
B41	Spruce St 42 nd St to 35 th St	Construct bike lanes on both sides of the street from 37 th to 42 nd (requires removing on-street parking)	High	\$210
B42	Spruce St 32 nd St to 17 th St	Construct bike lanes on both sides of the street from 25 th St to 17 th Street (requires removing on-street parking)	High	\$430
B43	Spruce St 17 th St to OR 126	Construct bike lanes on both sides of the street (requires removing on-street parking)	High	\$245
City Streets – Other Roads of Interest				
B44	4th Ave Heceta Beach Rd to Falcon St	Construct bike lanes on both sides of the street (coordinate with Project R12)	Low	\$0 ¹
B45	20th St Kingwood St to US 101	Add shared lane pavement markings	Medium	\$10
B46	Laurel St-Old Town Wy US 101 to Laurel St	Add shared lane pavement markings	High	\$5
B47	30th St Oak St to US 101	Add shared lane pavement markings	Low	\$5
B48	30th St US 101 to Spruce St	Add shared lane pavement markings	Low	\$5
B49	West Park Dr/18th St/Willow Lp/Willow St	Add shared lane pavement marking (coordinate with Project MU1)	High	\$15
Total High Priority Cost				\$6,100
Total Medium Priority Cost				\$2,010
Total Low Priority Cost				\$10
Total Cost				\$8,120

1. Project cost included in roadway system cost.

BICYCLE SYSTEM POLICIES

The bicycle system policies are provided below:

- » The City will perform regular street sweeping of US 101.
- » The City will perform regular enforcement of “No Parking in Bicycle Lanes”.
- » The City will institute a program to educate and encourage existing businesses to provide bicycle parking.
- » The City will work toward becoming a “Bicycle-Friendly Community”.

- » The City will create a map (available on paper and electronically) showing designated bicycle route through town (roads with bicycle lanes, multi-use paths, sharrows).
- » The City will partner with the Port to promote bicycle camping.
- » The City will educate bicyclists about rules of the road.
- » The City will partner with PeaceHealth to promote Bike to Work/School month, week, day.
- » The City will replace storm drains dangerous to bicyclists with drains that have cross-members.



CHAPTER 6. PUBLIC TRANSPORTATION SYSTEM

Public Transportation System

Public transportation in Florence is provided by three transit service providers – Rhody Express, Link Lane, and Coos County Area Transit. These providers operate a mixture of local and intercity service, providing connections to other transit services outside of the city.

- » **Rhody Express** provides two local fixed-route transit lines in the city. The North Loop serves areas north of 21st Street, along US 101, Spruce Street, and Oak Street, between the Grocery Outlet and Fred Meyer. The South Loop serves areas south of 21st Street, along Spruce Street, US 101, 9th Street, Rhododendron Drive, Kingwood Street, and Quince Street, circulating between Grocery Outlet, Safeway/Dunes Village Center, Peace Health Campus, the Old Town District, and Three Rivers Casino.
- » **Link Lane** runs two intercity bus routes that both terminate in Florence. The Eugene-Florence Connector provides bus service between Florence and Eugene along OR 126, with stops in Veneta and Mapleton. The Florence-Yachats Connector provides bus service between Florence and Yachats along US 101. The only stop in Florence is located at the Grocery Outlet, which connects to the Rhody Express routes as well as the Eugene-Florence Connector.
- » **Coos County Area Transit (CCAT)** operates the Florence Express, intercity bus service between North Bend and Florence along US 101, with stops in Lakeside, Winchester Bay, Reedsport, and Gardiner. Stops in Florence are located at the Grocery Outlet (which connects to all other transit service in Florence) and Three Rivers Casino.

PUBLIC TRANSPORTATION SYSTEM NEEDS

Inventory and public outreach indicate that there is a need for transit service in areas outside of where existing local or intercity services currently operate. Additionally, the existing service lacks amenities for those waiting for service or connecting between transit routes. Link Lane, which is a partnership between Lane Council of Governments and the Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians, is creating a transit development plan to identify service improvements within its broader Lane County service area. The City should ensure that it is set-up to capitalize on these coming transit investments. Focusing on local service improvements and bus stop enhancements will improve the transit experience and capitalize on Link Lane's transit planning work.

Service Improvements

Existing Rhody Express service is focused on areas south of 15th Street/Airport Road, and on Oak Street and Spruce Street north of 15th Street/Airport Road. Existing intercity service is focused primarily on US 101 and OR 126. This leaves large portions of the city – notably areas to the west of Oak Street and areas around Rhododendron Drive and Heceta Beach Road – without transit service. Link Lane’s ongoing Transit Development Plan will identify additional intercity service, but any service expansion is unlikely to address the local needs where transit service is lacking.

Stop Improvements

A typical Rhody Express bus stop in Florence consists of a pole with the Rhody Express sign and a bus schedule. There are often no other amenities, such as seating, shelter, trash cans, or lighting. Additionally, there are two locations – the Grocery Outlet at Spruce Street/21st Street and Three Rivers Casino – where multiple transit services connect but where limited transit center infrastructure is present. Addressing the needs of the small and the large transit stops will make the ridership experience more pleasant for everyone.

PUBLIC TRANSPORTATION SYSTEM PLAN

The public transportation plan consists of new fixed-route service (local and intercity), bus stop amenities, transit centers, park and rides, and mobility hubs. These facilities will expand and enhance the existing public transportation system and encourage more people to walk, bike, and take transit.

The types of facilities included in the public transportation plan include:

- » **Fixed-Route Service (local and intercity):** Fixed-route service refers to transit service that runs on regular, scheduled routes, with designated transit stops. Fixed-route service is typically characterized by service frequency (the time between arrivals), service hours (the number of hours service is provided throughout the day), and service coverage (the amount of the population, households, and jobs served by transit). Fixed-route service can operate at a local level within a city or at an intercity level over longer distances.
- » **Bus Stops:** Bus stops are designated locations where residents can access local transit service. Bus stops are normally located at major destinations and at key intersections. The types of amenities provided at each bus stop (e.g., pole, bench, shelter, ridership information, trash receptacles) tend to reflect the level of usage.
- » **Pole and Bus Stop Sign:** All bus stops require a pole and bus stop sign to identify the bus stop location.
- » **Bus Stop Shelters:** Shelters are typically provided at higher volume stops but may be considered at stops with fewer daily boardings if served by routes with long headways.
- » **Seating:** Seating should always be considered as long as it is accessible and the safety and accessibility of the adjacent sidewalk are not compromised by seating placement.
- » **Trash Receptacles:** While trash cans can be considered at any stop, they are usually located at stops with shelters and/or seating. Trash cans will require regular pick-up.
- » **Lighting:** Lighting is an important amenity for bus stops as it provides visibility and increased security for transit users waiting, boarding, and aligning transit service.

- » **ADA Accessibility:** Bus stops should be accessible for users with all ranges of abilities, including a concrete landing pad, adjacent parking restrictions, and ADA-compliant pedestrian ramps.
- » **Real-Time Bus Arrival Reader Boards:** Bus stops with several different routes can include an electronic arrival board showing when the next bus on each route is scheduled to arrive in real-time.
- » **Transit Centers:** Transit centers provide a single location where a large number of transit services operate to provide connections between various services. A transit center is larger than a bus stop and provides additional amenities (e.g., bathrooms, larger waiting areas). Shared-use transit center facilities are generally designated and maintained through agreements reached between the local public transit agency or rideshare program operator and the property owner. Shared-use transit center parking lots can save the expense of building a new parking lot, increase the utilization of existing spaces, and avoid utilization of developable land for surface parking.
- » **Park and Rides:** Park-and-rides provide parking for people who wish to transfer from their personal vehicle to public transportation or carpools/vanpools. Park-and-rides are frequently located near major intersections, at commercial centers, or intercity bus routes. It is Oregon state policy to encourage the development and use of park-and-rides at appropriate urban and rural locations adjacent to or within the highway right-of-way. Park-and-rides may be either shared-use, such as at a school or shopping center, or exclusive-use.
- » **Mobility Hubs:** Mobility hubs focus on the connectivity of public transit to a variety of travel modes, supporting non-single-occupancy-vehicle trips and helping to connect people to the different modes they need. All services and amenities do not need to be provided immediately adjacent to the hub as long as they are still within an easily accessible area. Shared mobility services such as bikeshare, carshare, e-scooters, and on-demand rideshare zones are all located within the hub, in addition to amenities such as transit waiting areas, pedestrian and bicycle facilities, bicycle parking, bicycle repair stations, and electric vehicle charging.

Table 9 identifies the projects developed for the public transportation system plan. The priorities shown in Table 9 are based on the project evaluation criteria as well as input from the project team. Priorities will be updated based on input from the advisory committee and the community. Figure 10 illustrates the location of the public transportation plan projects, where applicable.

Table 9: Public Transportation System Plan Projects

Map ID	Location	Description	Priority	Cost (\$1,000)
T1	Local Service	Add service to Rhododendron Dr and Heceta Beach neighborhood	High	0 ¹
T2	Intercity Service	Increase intercity service frequency, access to Eugene Airport and Southwest Oregon Regional Airport	Medium	0 ¹
T3	Marketing	Improve marketing for intercity service, specifically for Link Lane service to Eugene and to Yachats	High	\$50
T4	Transit Center	Establish a transit center at the Grocery Outlet bus stop on 21 st St, add bathroom facilities to transit center, formally establish a park-and-ride with	Medium	\$500

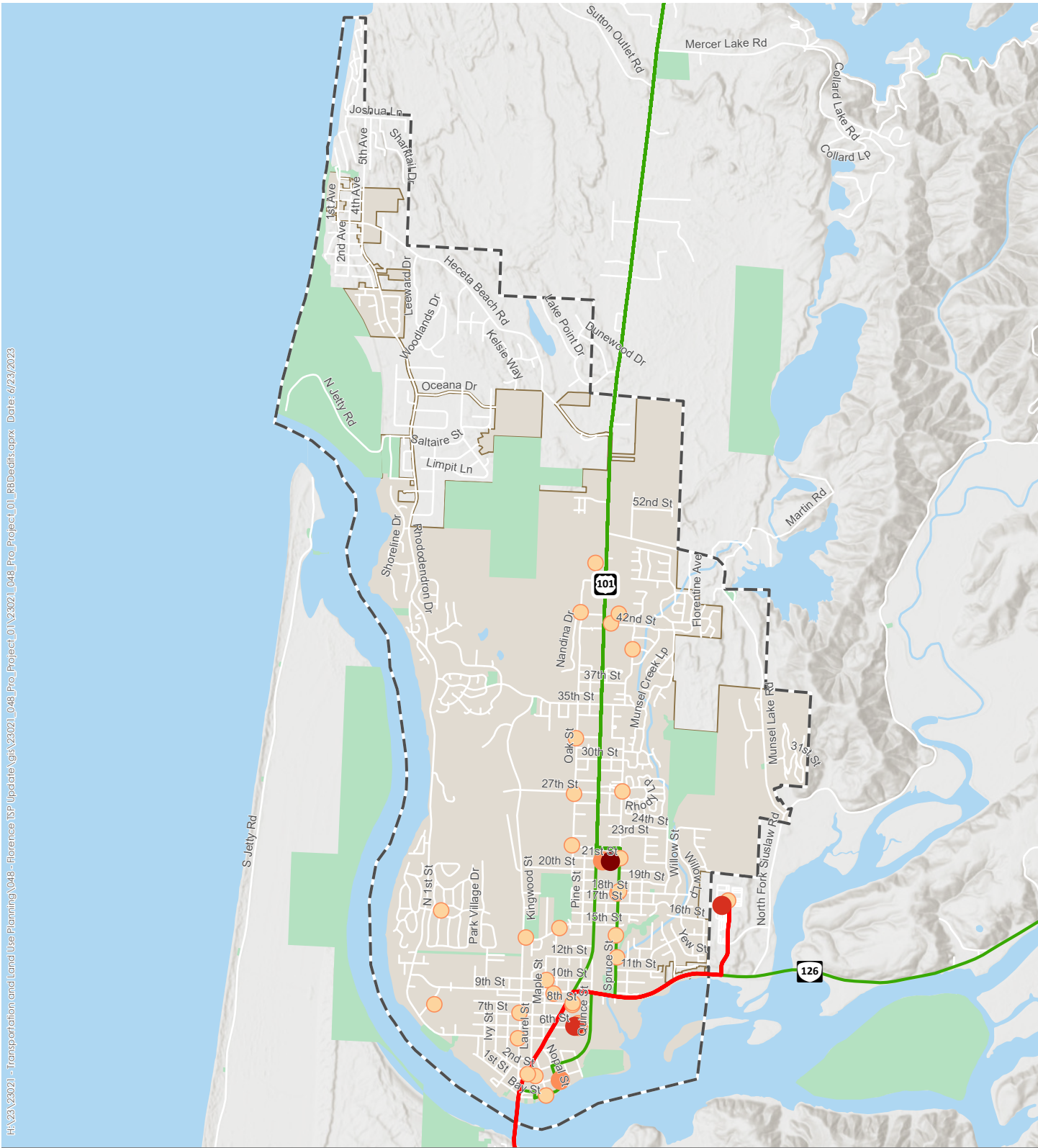
		Grocery Outlet, add transit shelters and/or benches to existing stop locations		
T5	Bus Stops	Add shelters and/or benches to existing bus stops and build bus stops that are accessible	High	\$250
T6	Park and Rides	Establish park-and-rides at Three Rivers Casino and Florence Events Center	Medium	\$100
T7	Mobility Hubs	Establish mobility hubs at Grocery Outlet (primary location), Port of Siuslaw parking lot (secondary location), and Florence Events Center (secondary location)	Medium	\$250
Total High Priority Cost				\$300
Total Medium Priority Cost				\$850
Total Low Priority Cost				\$0
Total Cost				\$1,150

1. Project will be funded by others or in conjunction with others.

PUBLIC TRANSPORTATION SYSTEM POLICIES

The transit system policies are provided below:

- » The City will work with Rhody Express, Link lane, and Coos County Transit to ensure adequate access to local transit stops.



- Project T2: Expanded Intercity Service
- Project T2/T3: Expanded Intercity Service/ Marketing
- Project T1: Local Service
- Project T4: Transit Center
- Project T6: Park-and-Ride
- Project T7: Mobility Hub

● Project T5: Bus Stop

■ Parks

■ Water

■ City Boundary

■ Urban Growth Boundary

0 0.5 1 Miles



Figure 10

Public Transportation Plan Projects Florence, Oregon



CHAPTER 7. AIR, RAIL, WATER, & PIPELINE SYSTEMS

Air System

The Florence Municipal Airport is the lone aviation facility in the city. The airport has a single, 3,000-foot paved and lighted runway and is open 24 hours a day, 7 days a week. The airport is home to 25 aircraft – 21 single engine planes, two helicopters, one multi-engine plane, and one jet plane – and there are an average of 134 aircraft operations per week.

According to the Oregon Aviation Plan, the Florence Municipal Airport is classified as a Local General Aviation Airport (Category IV). According to the plan, these airports “support primarily single-engine general aviation aircraft, but they are capable of accommodating smaller twin-engine general aviation aircraft. These airports support local air transportation needs and special-use aviation activities.”

AIR SYSTEM PLAN

The airport completed the *Airport Master Plan Update* in February 2010 to better understand existing facilities and activities, determine future airport needs, and create a capital improvement program to meet these future needs. Table 10 describes these projects and whether they have been completed.

Table 10. Florence Municipal Airport Master Plan Update Project List

Project	Description	Complete?
Runway and Taxiway Extension (Phase 1)	Construct the 400-foot north runway extension with a 200-foot displaced threshold for obstruction clearance.	No
Runway and Taxiway Extension (Phase 2)	Eliminate the 200-foot displaced threshold for Runway 15 by removing approximately 87,100 cubic yards of material from the sand dune.	No
Runway and Taxiway Extension (Phase 3)	Remove approximately 116,200 cubic yards of additional material from the sand dune.	No
Non-precision Instrument Approach	The development of an instrument approach is recommended for Runway 15/33.	No
Terminal Apron Reconfiguration & Expansion	The main apron will be reconfigured and expanded southward to increase current aircraft parking capacity, improve aircraft circulation within the apron, and meet FAA design standards.	Yes

Project	Description	Complete?
North Landside Development Area	The preferred alternative includes space reserved for development of additional conventional hangars, T-hangars and aircraft apron. As currently planned, the north landside area provides storage capacity for approximately 60 additional aircraft.	No
Parallel Taxiway Lighting	The parallel taxiway will be equipped with blue edge lighting or reflective edge markers.	Yes

AIR SYSTEM POLICIES

No projects were developed for the air system. However, projects identified in other sections of the TSP could improve access to air facilities inside and outside the city. In addition to these projects, air system policies are provided below.

- » Collaborate with the Florence Municipal Airport and the Oregon Department of Aviation to ensure that future roadway connections (such as an extension of Pacific View Drive) do not impact future runway expansion.
- » Coordinate with the Oregon Department of Aviation on proposed changes to land use, zoning, or transportation within the vicinity of the airport to maintain Federal Aviation Regulation (FAR) Part 77 airspace services depicted in the *Airport Master Plan Update*.
- » Work with neighboring residential uses to minimize issues of noise and vibration if/when night operations become a reality at the airport.

Rail System

There are no rail facilities within Florence. The closest rail facility is the Coos Bay Rail Line (CBRL), which spans 134 miles from Coquille to Eugene and crosses the Siuslaw River approximately 2.5 miles east of Florence. The rail line provides connections to the North American Rail Network for manufacturing operations in Coos, Douglas, and Lane Counties, and for marine terminals in the Coos Bay harbor.

The closest passenger rail service is provided by Amtrak, with stations in Eugene and Springfield. Amtrak operates the *Cascades* (Vancouver, BC to Eugene) and *Coast Starlight* (Seattle to Los Angeles), though some scheduled trips are partial segments of the entire route. Amtrak also operates Cascades POINT bus service between Portland and Eugene.

RAIL SYSTEM POLICIES

No projects were developed for the rail system. However, projects identified in other sections of the TSP could improve access to rail facilities outside the city. In addition to these projects, rail system policies are provided below.

- » The City will work with Link Lane on providing service or adjusting existing service to better coordinate with Amtrak and Cascade POINT at the stations in Eugene and Springfield.

Water System

The Siuslaw River is a navigable waterway that connects Florence to the Pacific Ocean and other inland communities. For 16.5 miles, the Siuslaw River is an officially designated federal waterway and is maintained as a navigation project by the US Army Corps of Engineers with local sponsorship by the Port of Siuslaw. The remainder of the approximately 720 square mile

Siuslaw river drainage basin falls within the district boundary of the Port of Siuslaw. Approximately five miles of the lower Siuslaw River system flows through the City of Florence.

The US 101 Siuslaw River Bridge crosses the river at River Mile (RM) 4.5. This drawbridge structure can be opened to accommodate waterborne commerce, primarily fishing boats. The CBRL crosses the river on the Cushman swing bridge at RM 8.2. OR 126 crosses the Siuslaw River in Mapleton at RM 20.7. The Mapleton Bridge and shallow water upstream effectively limit waterborne commerce at that point.

The US Coast Guard Station Siuslaw and coast Guard Auxiliary Flotilla provide motor lifeboat service and safety patrols on the Siuslaw River and coastal waters. Station Siuslaw is located at RM 1.5 in Florence. US Coast Guard Air Operations utilize the Florence Municipal Airport to support training and air/sea rescue operations.

The US Army Corp of Engineers maintains the federal waterway project on the Siuslaw River. Two rock jetties protect the mouth of the river. The authorized navigation waterway consists of an 18' deep x 300' wide entrance channel, a 16' deep x 200' wide channel to the Florence Turning Basin at RM 5.0, and a 12' x 150' wide channel extending upriver to RM 16.5. At RM 15.8, the channel widens into a turning basin 12' deep x 300' wide. The project was first authorized in 1910 with several later modifications. Annual maintenance dredging is performed on the lower reaches of the river with smaller amounts of dredging taking place upriver at less regular intervals. The Port of Siuslaw sponsors the federal water project on the Siuslaw River and maintains the only authorized upriver dredged material disposal site.

PORT OF SIUSLAW STRATEGIC BUSINESS PLAN

The Port's *Strategic Business Plan*, adopted in June 2013, outlined a five-year capital plan for marine, commercial fishing, and recreation activities. Large items are detailed below:

Bulkhead Repair

The Port constructed a bulkhead to protect the Harbor Street parking lot (located in the southeast corner of the Harbor Street/1st Street intersection), as well as riverfront campground sites. The plan notes that this is a vital facility for the Port, but because it does not generate any revenue, it poses a challenge to pay for repairs and replacement. For the Port, a safe and functional bulkhead is essential to the smooth operations. Total project costs at the time were estimated to be \$1.5 million, and no funding had been secured at the time that the plan was released.

Replace Debris and Shear Booms at Marina

At the time that the plan was released, the Port was using recovered logs as debris booms during the winter season to protect the marinas from floating debris. The installation and removal of these logs is a challenge and navigating around these logs are a challenge for boaters. The Port had researched light weight options as a more effective debris booms and was seeking \$600,000 to replace their existing debris booms.

Assessing Feasibility of Decommissioning Mapleton Facility

As of 2013, the Port owned a 140' transient vessel dock with 12 space parking lot in Mapleton. No portion of this facility was generating revenue for the Port. The Port is planning to study the decommissioning of the Mapleton facility or to transfer ownership of the facility to another entity.

Investigate Feasibility of Enhancing Commercial Fishing Opportunities

As of 2013, the Port was struggling to maintain commercial fishing operations. There were 10 active commercial boats catching albacore tuna and Dungeness crab, and projections at the time expected commercial fishing growth to remain flat. The Port sought to develop a

sustainable business model to help grow the local commercial fishing industry and drive up market prices.

Complete Siuslaw Estuary Trail

The City of Florence and the Port of Siuslaw have long sought to improve public access to the Siuslaw River. A proposed multi-use path would connect downtown Florence to the Three Rivers Casino, utilizing the Port's waterfront recreational areas (see Project MU2). The path would begin at the Siuslaw Interpretive Center, head east through downtown, across the Port riverfront, connect with the Munsel Creek path at OR 126 and terminate at the Three Rivers Casino. In 2013, the path's total estimated cost was \$678,000, which included an estimated cost of \$94,000 along Port property.

Since 2013, cost estimates for this trail have exceeded \$1,000,000. The city received a Recreational Trails Program grant from the Oregon Parks and Recreation Department for constructing Phase 1 of this project, from OR 126 at Redwood Street to Quince Street between Harbor Street and 6th Street.

WATER SYSTEM POLICIES

No projects were developed for the water system. However, projects identified in other sections of the TSP could improve access to the Siuslaw River as well as the Pacific Ocean. In addition to these projects, water system policies are provided below.

- » The City will work with Port of Siuslaw on implementing the planned improvements identified in their *Strategic Business Plan*.
- » The City will continue to support and promote improvements to the local and regional transportation system to ensure adequate access to the Siuslaw River and Pacific Ocean for residents and visitors.
- » The City will also promote recreational use of the Siuslaw River and investigate the feasibility of river transportation in the future.

Pipeline System

Florence has no major regional pipeline facilities within the UGB.

PIPELINE SYSTEM POLICIES

While there are no pipeline projects included in the TSP, the City will continue to support and promote improvements to the local and regional pipeline system to ensure adequate facilities and services for residents.



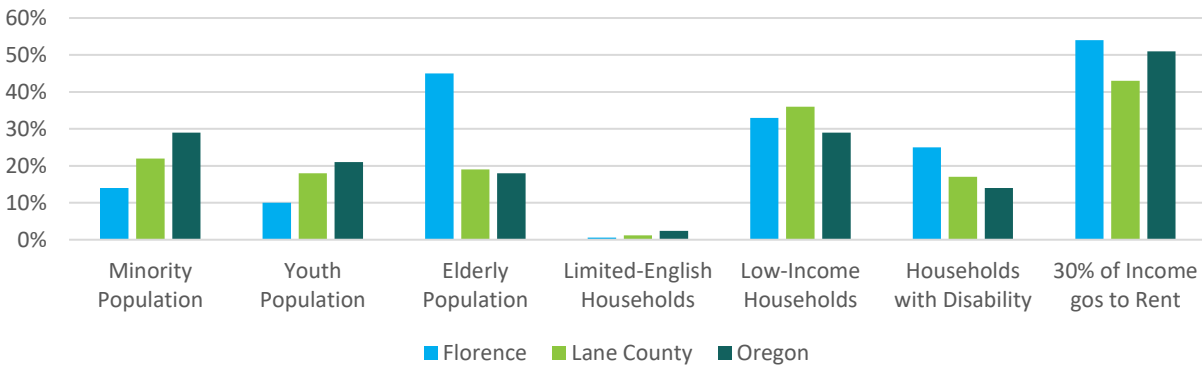
CHAPTER 8. EQUITY PLAN

Equity Plan

The needs of Title VI and Environmental Justice (EJ) populations were considered throughout the development of the Florence TSP. Title VI and EJ populations were identified early in the project to ensure the transportation planning and project development process was more inclusive of diverse communities. The information gathered through this effort was valuable in identifying the transportation needs that will provide the most benefits to identified populations. Seven population groups were considered for transportation impact susceptibility, representing those who may rely more heavily on public infrastructure or transit for access to day-to-day needs and jobs. They include minorities (non-white populations), youth (populations under 17), elderly (populations over 64), limited-English proficiency households, low-income households, households where people are living with disabilities, and households that pay more than 30 percent of their income in rent.

Information on each of these groups was obtained from the American Community Survey and evaluated at the State, County, and local level. The results indicate that Florence has a higher percentage of elderly populations, households with disabilities, and households that pay more than 30% of their income than the State and County; Florence also has a higher percentage of low-income households than the State, and only slightly fewer than the County. The remaining population groups, youth, minorities, and limited-English households are at a lower percentage than the State and County. Chart 1 summarizes the Title VI and EJ population data.

Chart 1: Title VI and EJ Population Summary



With a few notable exceptions, these groups are distributed relatively evenly throughout the city. The areas with the highest concentration of minorities are located south of 35th Street and between Kingwood Street and US 101, and south of 9th Street between Rhododendron Drive and US 101. The areas with the highest concentration of elderly are located south of Munsel Lake Road and east of US 101, between 35th Street and 9th Street and west of Kingwood Street. Additional information on the make-up and location of these groups is available in *Tech Memo #3A in the Volume II: Technical Appendix*.

The needs of these groups are reflected in the goals and objectives used to guide development of the TSP and in the evaluation criteria used to develop the preferred and cost constrained plans. Many of the projects included in the TSP will enhance access and circulation within Florence for people walking, biking, and taking transit. Of the projects included in the cost constrained plan, most are pedestrian, bicycle, or transit projects while the remaining have elements that will enhance each of these modes. In addition, many of the policies included in the modal chapters of the plan are intended to ensure the transportation system will continue to develop in a way to further enhance transportation options for local residents, especially those that are dependent on non-motorized travel.



CHAPTER 9. MANAGING THE TRANSPORTATION SYSTEM

Managing the Transportation System

Transportation System Management (TSM) and Transportation Demand Management (TDM) are two complementary approaches to managing and maximizing the efficiency of the transportation system. The section presents plans and policies for TSM and TDM as well as plans and policies for neighborhood traffic management and parking management.

TRANSPORTATION SYSTEM MANAGEMENT

Transportation System Management (TSM) focuses on low-cost strategies that can be implemented within the existing transportation infrastructure to enhance operational performance. Finding ways to better manage the transportation system while maximizing urban mobility and treating all modes of travel as a coordinated system is a priority. TSM strategies include traffic signal timing and phasing optimization, traffic signal coordination, and intelligent transportation systems (ITS). Traffic signal modifications and ITS applications typically provide the most significant tangible benefits to the traveling public. The primary focus of TSM measures are region-wide improvements, however there are a number of TSM measures that can be applied in Florence, including: traffic signal timing and phasing optimization at signalized intersections, real-time traveler information on US 101 and OR 126, and real-time transit information at local transit stops, on-line, and via smartphone applications. Several of these measures are included in other elements of the TSP.

TRANSPORTATION DEMAND MANAGEMENT

Transportation Demand Management (TDM) is a term used to describe policies and strategies that remove single occupancy vehicle trips from the roadway during peak time periods. As population and employment increase in the city, the number of trips will also increase. The ability to change travel behavior and provide alternative modes will help accommodate the growth in trips without the need for significant investments in new infrastructure. A major focus of TDM is on major employers; however, there are many things the City can do to support TDM implementation, including providing sidewalks and bike lanes that allow people to travel safely and efficiently on foot or by bike; providing local transit facilities and services that allow people to travel by bus, and establishing development patterns that encourage non-auto-oriented travel. Several of these strategies are included in other elements of the TSP.

TDM Strategies

There are several strategies that may be effective for managing demand in Florence. Table 11 summarizes the strategies that best meet the goals and objectives of the TSP. As with all new public and private investments, the implementation of TDM strategies is sure to draw opposition from some. Given Florence's limited experience with TDM, it is important that decision-makers understand their long-term costs and benefits and can evaluate these along-side arguments from opponents in achieving outcomes that best reflect the City's vision and goals while effectively reducing travel demand.

Table 11. Potential TDM Strategies

Strategy	Description
Bicycle Improvements	Improved design and maintenance of shared streets, bike lanes, and paths
Bicycle Parking	Improved bicycle parking, storage, and changing facilities
Bike/Transit Integration	Improved bicycle access and storage at transit stops and stations, and the ability to carry bikes on transit vehicles
Pedestrian Improvements	Improved design and maintenance of sidewalks, crosswalks, paths, and amenities
Bike/Walk Encouragement	Promotion campaigns, events, educational programs, guides and user info
Transit Improvements	Improve transit facilities and service (stop amenities, hours, frequency, coverage)
Shuttle Service	Shuttle buses, demand response and other special mobility services
Ridesharing	Carpool/vanpool programs and services
Wayfinding	Provide wayfinding improvements and other multimodal navigation tools
Streetscape Improvements	Redesign roadways to support multimodal transportation and create more attractive and accessible communities
Connectivity Improvements	Improved roadway and pathway connectivity
Traffic Calming	Roadway design features intended to reduce traffic speeds and volume
Vehicle Use Restrictions	Limit vehicle traffic at a particular time or place
Parking Management	Various management strategies that result in more efficient use of parking
Park-and-ride	Park-and-rides can support ridesharing and public transit use
Downtown Centers	Creating vibrant downtowns mixed-use activity centers

TDM Policies

While there are no TDM projects in the TSP, they are an important part of the City's ongoing effort to improve the efficiency of the transportation system. The following policies will help guide the City in future planning and development efforts.

- » Learn about TDM and the role it can play in achieving local planning objectives.
- » Encourage and require local businesses to implement TDM solutions.
- » Work to build partnerships with community organizations to support TDM implementation.
- » Help create TDM programs to provide local TDM services.
- » Improve non-motorized transportation facilities, public transit services, and other transportation services.
- » Support carshare, ridesharing, bikeshare, e-scooters, and other micromobility services.
- » Apply more comprehensive transportation planning, including multimodal level of service indicators when evaluating transportation improvements.

- » Implement TDM strategies, such as commute trip reductions programs for employees, and special transportation management when sponsoring events that attract crowds.

TDM strategies help achieve many of the City's goals, including reduced traffic congestion, reduced parking demand, improved mobility for non-drivers, improved community livability, improved public fitness and health, and others.

NEIGHBORHOOD TRAFFIC MANAGEMENT

Neighborhood Traffic Management (NTM) is a term used to describe traffic control devices that reduce travel speeds and traffic volumes in residential neighborhoods. NTM is also commonly referred to as traffic calming because of its ability to calm traffic. NTM strategies have been implemented in locations throughout the city; however, there are many areas where additional NTM could be considered. Table 12 lists several common NTM options that are typically supported by emergency response as long as minimum street criteria are met.

Table 12. Neighborhood Traffic Management (NTM) Options by Functional Classification

Measure	Roadway Classifications		
	Arterial	Collector	Local
Curb Extension	Supported	Supported	NTM measures are generally supported on lesser response routes that have connectivity (more than two accesses)
Raised Median Island	Supported	Supported	
Pavement Texture	Supported	Supported	
Sign	Supported	Supported	
Lane Width	Supported	Supported	
Diverter	Not Supported	Supported	
Speed Hump	Not Supported	Not Supported	
Raised Crosswalk	Not Supported	Not Supported	
Speed Cushion	Not Supported	Not Supported	
Choker	Not Supported	Not Supported	
Traffic Circle	Not Supported	Not Supported	
Meandering Alignments	Not Supported	Not Supported	

Note: NTM measures are supported with the qualification that they meet emergency response guidelines including minimum street width, emergency vehicle turning radius, and accessibility/connectivity.

As shown in Table 12, several NTM solutions are limited to local streets; on arterial or collector streets, implementation of these NTM solutions can be counterproductive and lead to cut through traffic on local streets. NTM solutions on arterial and collector streets can also cause conflicts for emergency response as well as freight and public transit.

NTM Policies

While there are no NTM projects in the TSP, they are an important part of the City's ongoing effort to improve safety and livability. The following policies will help guide the City in future planning and development efforts.

- » The City will consider implementation of NTM strategies along with other strategies in addressing traffic safety and livability in the City.
- » The City will coordinate with emergency service providers to ensure implementation of NTP strategies will not compromise public safety.

PARKING MANAGEMENT

The City, in coordination with ODOT, completed a parking study in June 2021. The study includes an inventory and assessment of parking conditions in the greater historic downtown area, including the commercial, mixed-use, and special event areas located immediately north of the downtown straddling both sides of US 101. The study provides an inventory of the current parking supply and an assessment of the current parking demand on a typical weekday and weekend day during the peak summer months.

Key findings from the parking study include:

- » Of the 933 on-street parking stalls within the study area, 805 parking stalls have no time restrictions. The remaining stalls consist of 10-minute (5), 30-minute (3), and 3-hour (120) stalls. All stalls are provided free of charge.
- » Within the study area, overall on-street peak occupancy rates are 30.4% at 1:00 PM on the weekday and 33.8% at 1:00 PM on the weekend day. Occupancy rates in the 3-hour stalls (located within Old Town) are significantly higher than the overall rates: 90.6% at 2:00 PM on the weekday and 95.3% at 1:00 PM on the weekend day.
- » Within the study area, overall off-street peak occupancy rates are 33.9% at 2:00 PM on the weekday and 34.9% at 1:00 PM on the weekend day. Occupancy rates in the off-street stalls that support restaurant uses are significantly higher than the overall rates: 97.3% at 12:00 PM on the weekday and 97.1% at 6:00 PM on the weekend day.

Conclusions from the parking study include:

- » Though the entire parking system is far from constrained, the on- and off-street systems near Bay Street are highly utilized. However, on-street and off-street parking is generally available nearby (within a couple blocks).
- » Basic parking management strategies can help redirect demand into areas with surplus parking, while freeing up more centrally located stalls for higher turnover users.

Additional information on the study, including the study itself, is available in Tech Memo 3B: Existing Conditions Analysis in the Volume II: Technical Appendix.

Parking Management Strategies

The parking management strategies developed for Florence are shown in Table 13. These strategies are focused on improving user information, enhancing parking management, enhancing enforcement, and increasing the parking supply. Most of these strategies are applicable to Old Town; however, the City could implement similar strategies in other areas throughout the city to better manage parking demand while also improving access and circulation for all travel modes. The priorities shown in Table 13 are based on the project evaluation criteria as well as input from the project team; the priorities will be updated based on input from the advisory committee and the community

Table 13. Parking Management Strategies

Map ID	Location	Description	Priority	Cost (\$1,000)
PM1	US 101, OR 126, and Quince St	Install wayfinding signs that direct motorists to off-street public parking facilities in Old Town	High	\$50
PM2	Old Town	Develop neighborhood parking maps and how to park resources in coordination with local	Medium	\$50

		destinations and post them online and in prominent locations		
PM3	Old Town	Create a parking ambassador position to provide information and guidance on parking in Old Town	Medium	0 ¹
PM4	Old Town Area A	Stripe on-street parking stalls on both sides of all streets in Old Town Area A	High	\$50
PM5	Old Town Area A	Install signage on both sides of all streets in Old Town Area A to indicate time limitations (3-hours), hours of enforcement (8:00 AM to 5:00 PM), and directional arrows indicating the stalls where restrictions apply	High	\$50
PM6	Old Town Area B	Stripe on-street parking stalls on both sides of all streets in Old Town Area B	Medium	\$50
PM7	Old Town	Implement and manage an area parking permit program for residents and employees of local businesses Old Town	Low	0 ¹
PM8	Old Town/ City Wide	Implement regular parking enforcement of on-street parking regulations in Old Town and other areas as applicable	Low	0 ¹
PM9	Old Town/ Citywide	Establish remote parking areas that are served by transit to relocate parking demand to the fringe area of the community	Low	0 ¹
PM10	Old Town/ Citywide	Establish public-private partnerships to open access to existing private parking facilities or construct new parking (for instance, through co-financing) to serve both site-specific users and the public	Low	0 ¹
Total High Priority Cost				\$150
Total Medium Priority Cost				\$100
Total Low Priority Cost				\$0
Total Cost				\$250

1. Project will be self-funded, funded by others, or in conjunction with others.

Parking Management Policies

The parking management policies are summarized below:

- » The City will establish a parking collaborative in Old Town to align the City's interest with local businesses and associations.
- » The City will require good neighbor agreements between local businesses and associations to indicate how parking needs will be met and issues will be addressed.
- » The City will conduct outreach to educate and inform the public about changes to parking policies and strategies in Old Town and provide information on travel options.
- » The City will coordinate with community destinations to improve safety and security in Old Town (e.g., neighborhood watch, community policing, special police patrols, improved lighting, pedestrian escorts, monitoring of facilities).
- » The City will continue to monitor, measure, and evaluate the performance of the parking system and adjust policies and strategies to increase efficiency.
 - » Implement/recalibrate restrictions (e.g., time limits/users).
 - » Establish parking zones (e.g., loading zones, pick-up/drop-off zones).
 - » Reconfigure parking facilities to identify additional space for parking.

ACCESS MANAGEMENT

The term “access management” is commonly used to describe the practice of managing the number, placement, and movements of intersections and driveways that provide access to adjacent land uses. Access management policies can be an important tool to improve transportation system efficiency by limiting the number of opportunities for turning movements on to or off of certain streets. In addition, well deployed access management strategies can help manage travel demand by improving travel conditions for pedestrian and bicycles – eliminating the number of access points on roadways allows for continuous sidewalk and bicycle facilities and reduces the number of potential interruptions and conflict points between pedestrians, bicyclists, and cars.

Access management can be extremely difficult to implement once properties have been developed along a corridor. Cooperation among and involvement of relevant government agencies, business owners, land developers and the public is necessary to establish an access management plan that benefits all roadway users and businesses.

City Access Spacing Standards

The City’s access spacing standards are determined by functional classification and provide spacing between intersections, between intersections and driveways, and between driveways. Table 14 summarizes City’s access spacing standards.

Table 14. City Access Spacing Standards

Functional Classification	Minimum Spacing Between Intersections (ft)	Minimum Spacing between Intersections and Driveways (ft)	Minimum Spacing between Driveways (ft)
Alley	N/A	15	N/A
Local Street	125	25	25
Collector Street	250	30	125
Arterial Street	250	50	125

ODOT Access Spacing Standards

Oregon Administrative Rule (OAR) 734, Division 51 establishes procedures, standards, and approval criteria used by ODOT to govern highway approach permitting and access management consistent with Oregon Revised Statutes (ORS), Oregon Administrative Rules (OAR), statewide planning goals, acknowledged comprehensive plans, and the OHP. The OHP serves as the policy basis for implementing Division 51 and guides the administration of access management rules, including mitigation and public investment, when required, to ensure highway safety and operations pursuant to this division.

Access spacing standards for approaches to state highways are based on highway classification and differ depending on posted speed and average annual daily traffic (AADT). Within Florence, US 101 and OR 126 are classified as statewide highways with speeds that range from 30 to 55 mph, and all AADTs are above 5,000 vehicles. Table 15 summarizes ODOT’s current access spacing standards for US 101 and OR 126.

Table 15. ODOT Access Spacing Standards

Posted Speed	Access Management Spacing Standards for Statewide Highways with Annual Average Daily Traffic >5,000	
	Rural Areas	Urban Areas
55 or higher	1,320	1,320
50	1,100	1,100
40 & 45	990	800
30 & 35	770	500
25 & lower	550	350

Access Management Policies

The access management policies are provided below.

- » Defer to ODOT access spacing standards and policies on ODOT facilities.
- » Ensure all new developments meet access spacing standards.
- » Consolidate non-conforming access points as part of redevelopment to move in the direction of access spacing standards.
- » Establish access variance policies for parcels whose highway/street frontage, topography, or location would otherwise preclude conforming access spacing.

A comprehensive list of potential access spacing variance policies and an approach for access consolidation are provided in *Tech Memo 5: Alternatives Analysis in the Volume II: Technical Appendix*.

EMERGING TECHNOLOGY

Transportation technologies are rapidly evolving, and cities are evaluating what steps they can take to be prepared. The challenge is that most emerging technologies are initiated by the private sector and can be difficult to predict. So how can cities use their money efficiently while also seeing the benefits of emerging technology?

Emerging Technology Policies

The following summarizes a list of discrete steps (primarily planning and policy related) that the City can take to be prepared for the emergence of new transportation technologies.

- » Create a Transportation Technology Liaison Role: This role should serve to carry out the listed tasks below.
- » Connect with cities in the surrounding area (Eugene), establish a service zone for any emerging technology coming to the area.
- » Develop partnerships and programs with Lane Community College and the University of Oregon to attract students.
- » Review the development code and create avenues for flexible uses.
- » Hold public outreach to determine which emerging technologies local residents are interested in.
- » Meet with ODOT, Lane County, and other relevant jurisdictions in the surrounding area and discuss emerging technologies.

- » Establish a primary and secondary mobility hub in the City.
- » Consider adding EV charging stations at key destinations (PeaceHealth Pease Harbor Medical Center, grocery stores, Three Rivers Casino Resort, and Old Town) and EV charging requirement to development code.
- » Invest in pick-up drop-off loops and adaptive reuse design for any parking structures/lots.
- » Allow multiple ride-hailing services and micromobility services (E-scooters, bike share, etc.) to be established in Florence.

Additional information on the plans and policies the City can implement to prepare for emerging technology is provided in *Tech Memo 5: Alternatives Analysis in the Volume II: Technical Appendix*.



CHAPTER 10. IMPLEMENTATION PLAN

Implementation Plan

The TSP identifies the plans, policies, programs, and projects needed to address gaps, deficiencies, and needs within the city's transportation system over the next 20 years. The preferred plan consists of all projects identified throughout the TSP planning process while the cost constrained plan consists of projects the City anticipates being able to fund over the next 20 years⁴. The amount of local funds available for capital projects in the TSP is estimated to be approximately \$10 million or roughly \$0.50 million per year.

CURRENT FUNDING SOURCES

Funding for transportation improvements in Florence is primarily generated by the state gas tax and several local sources, including system development charges (SDCs).

State Gas Tax

State gas taxes are comprised of proceeds from excise taxes imposed by the state and federal government to generate revenue for transportation funding. The proceeds from these taxes are distributed to Oregon counties and cities in accordance with Oregon Revised Statute (ORS) 366.764, by county registered vehicle number, and ORS 366.805, by city population. The Oregon Constitution states that revenue from the state gas tax is to be used for the construction, reconstruction, improvement, maintenance, operation and use of public highways, roads, streets, and roadside rest areas.

System Development Charges

SDCs are fees assessed on developments for impacts to the transportation system. All revenue is dedicated to transportation capital improvement projects designed to accommodate growth. The City can offer SDC credits to developers that provide public improvements beyond the required street frontage, including those that can be constructed by the private sector at a lower cost. For example, SDC credits might be given for providing off-site improvements, such as

⁴ The cost constrained plan does not limit the City or ODOT from advancing other projects in the TSP in response to changes in development patterns and funding opportunities that are not known at this time. There is no obligation to do these projects, nor assurance that these projects will be completed.

sidewalks and bike lanes that connect the site to nearby transit stops. Florence uses the revenue from SDCs on eligible projects that cannot be funded by other means.

Transportation System Cost Summary

Table 16 summarizes the full cost of the preferred and cost constrained plans for the TSP Update. As shown, the full cost of the preferred plan is approximately \$87.3 million over the 20-year period, including \$36.2 million in high priority projects, \$27.9 million in medium priority projects, and \$23.2 million in low priority projects. Based on the anticipated funds available for capital improvements, the cost constrained plan includes the high priority projects.⁵ Although the projected funding based on current revenue sources does not cover the full cost of the high priority projects, the City plans to pursue additional funding to support the cost constrained plan.

Table 16: Transportation System Cost Summary

Project Type	High Priority (\$1,000)	Medium Priority (\$1,000)	Low Priority (\$1,000)	Total (\$1,000)
Planned Transportation System				
Roadway	\$1,800	\$11,695	\$16,670	\$30,165
Safety	\$700	\$400	\$50	\$1,150
Pedestrian	\$21,850	\$9,665	\$3,830	\$35,345
Crossing	\$750	\$1,000	\$1,500	\$3,250
Multi-use Path	\$4,555	\$2,160	\$1,180	\$7,895
Bicycle	\$6,100	\$2,010	\$10	\$8,120
Transit	\$300	\$850	\$0	\$1,150
Parking	\$150	\$100	\$0	\$250
Total	\$36,205	\$27,880	\$23,240	\$87,325

Note: TDM = Transportation Demand Management

Given limited funding, the City will need to identify additional revenue sources to implement all transportation-related capital improvement projects identified in the financially constrained and the preferred plan over the next 20 years.

Potential Funding Sources

The City will likely rely upon transportation improvements grants, partnerships with regional and state agencies, and other funding sources to help implement future transportation-related improvements. Table 17 summarizes the funding opportunities and identifies the intended use of the funds and any applicable project types.

Table 17: Potential Funding Sources

Funding Source	Description	Intended use
Federal Sources		

⁵ The high priority projects include those that are most likely to be funded by the City over the 20-year planning horizon. The medium and low priority projects are aspirational and will be funded through grants and additional funding sources as they become available and/or by private developers as part of future development.

Infrastructure Investment and Jobs Act (IIJA)	The IIJA (aka “Bipartisan Infrastructure Law,” BIL) signed into law in November 2021 includes a five-year (FY 2022-26) reauthorization of existing federal highway, transit, safety, and rail programs as well as new programs (resilience, carbon reduction, bridges, electric vehicle charging infrastructure, wildlife crossings, and reconnecting communities) and increased funding. Oregon will receive over \$4.5 billion over the next five years.	Projects around the state that will benefit drivers, transit riders, cyclists, and pedestrians, and that help maintain roads and bridges, and address climate change.
Surface Transportation Block Grant (STBG) Program	The STBG program provides flexible federal dollars that can be used for City projects to preserve and improve the conditions and performance of any Federal-aid highway, bridge, or tunnel on any public road, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals. The City can either apply 100 percent of these funds toward projects that comply with federal regulations or exchange the funds with the state and apply 90 percent toward projects that do not have federal constraints.	Preserve and improve surface transportation investments from a flexible funding source
Transportation Alternatives (TA)	The BIL continues the TA set-aside from the STBG program. Eligible uses of the set-aside funds include all projects and activities that were eligible under the previously spending bill. This encompasses a variety of smaller-scale transportation projects.	Pedestrian and bicycle facilities, recreational trails, safe routes to school projects, community improvements such as historic preservation and vegetation management, and environmental mitigation related to stormwater and habitat connectivity.
Highway Safety Improvement Program (HSIP)	The HSIP is a core Federal-aid program with the purpose to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-State-owned roads and roads on tribal land. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads with a focus on performance.	Project that reduce traffic fatalities and serious injuries on all public roads
Rebuilding American Infrastructure with Sustainability and Equity (RAISE)	The RAISE Discretionary Grant program invests in road, rail, transit, and port projects that promise to achieve national objectives. RAISE can provide capital funding directly to any public entity, including municipalities, counties, port authorities, tribal governments, MPOs, or others in contrast to traditional Federal programs which provide funding to very specific groups of applicants (mostly State DOTs and transit agencies).	Road, rail, transit, and port projects aimed toward national objectives with significant local or regional impact.
National Highway Performance Program (NHPP)	The NHPP provides support for the condition and performance of the National Highway System (NHS), for the construction of new facilities on the NHS, and to ensure that investments of Federal-aid funds in highway construction are directed to support progress toward the achievement of performance targets established in a State's asset management plan for the NHS.	NHS roads and bridges (and non-NHS bridges so long as bridge condition provision requirements are satisfied).
State Sources		
Statewide Transportation	STIP is the State of Oregon's four-year transportation capital improvement program. ODOT's system for distributing these funds has	Multi-modal projects on federal, state, and local facilities that meet the

Improvement Program (STIP)	varied over recent years. Generally, local agencies apply in advance for projects to be funded in each four-year cycle.	benefit categories of the STIP
Transportation and Growth Management (TGM) Grants	TGM grants are planning grants administered by ODOT and awarded on an annual basis. They are generally awarded to projects that will lead to more livable, economically vital, transportation efficient, sustainable, and pedestrian-friendly communities. The grants are awarded in two categories: transportation system planning and integrated land use/transportation planning.	Transportation system plans and planning efforts that integrate land use and transportation.
State Highway Trust Fund/Bicycle Bill	When roads are constructed or reconstructed, Oregon law requires walkways and bikeways to be provided. Additionally, all agencies receiving State Highway Funds are required to spend at least 1% of those funds on bicycle and/or pedestrian infrastructure improvements (ORS 366.514). Currently, cities and counties receive 20% and 30% of the state's highway trust funds, respectively, which can be used for walking and biking projects along roads.	Bicycle and pedestrian projects.
Sidewalk Improvement Program (SWIP)	ODOT's SWIP builds pedestrian and bicycle facilities on state roads and local roads that help people moving across or around the state system.	Pedestrian and bicycle projects
Safe Routes to School (SRTS)	SRTS, administered by ODOT, focuses on infrastructure and non-infrastructure programs to improve access and safety for children to walk, roll, and/or bike to school.	Pedestrian and bicycle projects that improve safety for children walking or biking to school
All Roads Transportation Safety (ARTS)	The federal Highway Safety Improvement Program (HSIP) is administered as ARTS in Oregon. ARTS provides funding to infrastructure and non-infrastructure projects that improve safety on all public roads. ARTS requires a data-driven approach and prioritizes projects in demonstrated problem areas.	Projects that address hotspot and systemic safety issues and concerns (roadway departure, intersection safety, and bicycle and pedestrian safety)
Oregon Parks and Recreation Local Grants	Oregon Parks and Recreation Department administers this program using Oregon Lottery revenues. These grants can fund acquisition, development, and major rehabilitation of public outdoor parks and recreation facilities. Local match is required.	Trails and other recreational facility development or rehabilitation.
Oregon Community Paths (OCP) Program	This State of Oregon program combines funds from the Multimodal Active Transportation Fund, Oregon Bicycle Excise Tax, and federal Transportation Alternatives Program to help communities create and maintain connections with primarily off-street pedestrian and bicycle facilities.	Off-street pedestrian and bicycle facilities
Local Sources		
Transportation Systems Development Charge (SDC)	SDCs are fees assessed to development for the capacity demand it creates on public infrastructure systems. SDCs may be an improvement fee, a reimbursement fee, or a combination thereof. Reimbursement fee revenues are dedicated to capital projects that increase capacity to meet the needs of growth. SDC credits are provided to developers for public improvements they construct which add capacity to the system beyond that required to serve their	SDCs may only be used for the portion of transportation improvements that generate additional capacity demand related to growth.

	development. SDC credits may also be given for development provisions that reduce vehicular capacity demand on the transportation system, such as providing end-of-trip bike facilities within the new development.	
Tax Increment Financing (TIF)	TIF is a tool that cities may use to create special districts (tax increment areas) where public improvements are made to generate private-sector development. During a defined period, the City freezes the tax base at the pre-development level. Property taxes for that period can be waived or paid, but taxes derived from increases in assessed values (the tax increment) resulting from new development can go into a special fund created to retire bonds issued to originate the development or leverage future improvements. A number of small-to-medium sized communities in Oregon have implemented, or are considering implementing, urban renewal districts that will result in a TIF revenue stream.	System-wide transportation facilities including streets, sidewalks, bike lanes, and shared use paths, and transit.
Local Fuel Tax	A local tax can be assessed on the purchase of fuel within the City. This tax is added to the cost of fuel at the pump, along with the state and federal gas taxes. Several cities throughout Oregon have a local fuel tax, including the City of Reedsport, which applies the tax during the peak summer months (May – October).	System-wide transportation facilities including streets, sidewalks, bike lanes, and shared use paths.
Local Improvement Districts (LIDs)	LIDs pool funds from property owner to make local transportation improvements.	Transportation facilities including streets, sidewalks, bikeways, and transit located within the LID area.
Economic Improvement Districts (EIDs)	EIDs pool funds from area businesses to make improvements in the business district.	Transportation facilities including streets, sidewalks, bikeways, and transit located within the EID area.
Revenue and General Obligation Bonds	Bonding allows municipal and county government to finance construction projects by borrowing money and paying it back over time, with interest. Financing requires smaller regular payments over time compared to paying the full cost at once, but financing increases the total cost of the project by adding interest. General obligation bonds are often used to pay for construction of large capital improvements and must be approved by a public vote. These bonds add the cost of the improvement to property taxes over time.	Construction of major capital improvement projects within the city, street maintenance and incidental improvements.
Street Utility Fees / Road Maintenance Fees	A fee based on the number of automobile trips a particular land use generates; usually collected through a regular utility bill. Fees can also be tied to the annual registration of a vehicle to pay for improvements, expansion, and maintenance of the street system.	System-wide transportation facilities including streets, sidewalks, bike lanes, and shared use paths.