



CITY OF WALDPOR, OREGON **TRANSPORTATION SYSTEM PLAN**

2019

Adopted X.XX.2018 by Ordinance 18-XX

DRAFT

WALDPART TRANSPORTATION SYSTEM PLAN

Waldport, Oregon

Prepared For:

The City of Waldport

125 NW Alsea Highway

Waldport, OR 97394

(503) 264-7417

Prepared By:

Kittelson & Associates, Inc.

851 SW 6th Avenue, Suite 600

Portland, OR 97204

(503) 228-5230

Project Principal: Marc Butorac, PE, PTOE, PMP

Project Manager: Susan Wright, PE, PMP

Deputy Project Manager: Matt Bell

Project Analyst: Krista Purser

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City Council Members

- » Mark Campbell
- » Harry Dennis
- » Greg Dunn
- » Greg Holland
- » Paul Virtue
- » Sue Woodruff

Planning Commission Members

- » Steve Barham
- » Kitty Kelleher
- » Heide Lambert
- » Jerry Phillips
- » Ruth Stole
- » Michael Schlosser
- » Ray Woodruff

Public Advisory Committee (PAC) Members

- » Harry Dennis, *City Council*
- » Jerry Phillips, *Planning Commission*
- » Paul Virtue, *ADA Advocate*
- » Chris Tryon, *Cyclist Advocate*
- » Roxie Cuellar, *Port of Alsea*
- » Ray Woodruff, *Citizen/Sherriff's Advisory Committee*
- » Chief Gary Woodson, *Central Coast Fire & Rescue District*
- » Ron Remund, *Chamber of Commerce*

Project Management Team (PMT) Members

- » Kerry Kemp, *City of Waldport*
- » Larry Lewis, *City of Waldport*
- » David Helton, *Oregon Department of Transportation*
- » Susan Wright, PE, PMP, *Kittelsohn & Associates, Inc.*
- » Matthew Bell, *Kittelsohn & Associates, Inc.*

Consultant Team Members

- » Marc Butorac, PE, PTOE, PMP, *Kittelsohn & Associates, Inc.*
- » Susan Wright, PE, PMP, *Kittelsohn & Associates, Inc.*
- » Matthew Bell, *Kittelsohn & Associates, Inc.*
- » Krista Purser, *Kittelsohn & Associates, Inc.*
- » Alicia Hunter, *Kittelsohn & Associates, Inc.*
- » Darci Rudzinski, *Angelo Planning Group*
- » Clinton "CJ" Doxsee, *Angelo Planning Group*

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INTRODUCTION

The Waldport transportation system plan (TSP) is a long-range plan that identifies improvements to the city's transportation facilities and services to meet state, regional, and local transportation needs for the next 20 years. The TSP was developed with community and stakeholder input and is based on existing and projected future transportation system needs and anticipated funding. The plan also serves as the Transportation Element of the Waldport Comprehensive Plan.

The purpose of the 2019 TSP update is to address growth in Waldport and its surrounding communities as well as address regulatory changes that have occurred in the region since 1999. The TSP addresses compliance with new or amended federal, state, and local plans, policies, and regulations including the Oregon Transportation Plan (OTP), the state's Transportation Planning Rule (TPR), the Oregon Highway Plan (OHP), and presents the investments and priorities for the Pedestrian, Bicycle, Transit, Motor Vehicle, and other transportation systems.

WALDPOR TSP 2019

The City of Waldport is located along the Oregon Coast at the mouth of the Alsea River, and is home to a population of approximately 2,200 people. The city lies at the intersection of the Oregon Coast Highway (US 101) and the Alsea Highway (OR 34) – OR 34 is an Oregon Scenic Byway from Interstate 5 (I-5) to Waldport. US 101 runs north-south and OR 34 runs east-west through the city's downtown commercial district. US 101 is commonly referred to as Main Street due to its character of abutting businesses and attractions. Traveling to and from Waldport is most commonly achieved along US 101 via Newport and OR 34 via Corvallis. Figure 1 illustrates the study area for the TSP.

KEY DESTINATIONS

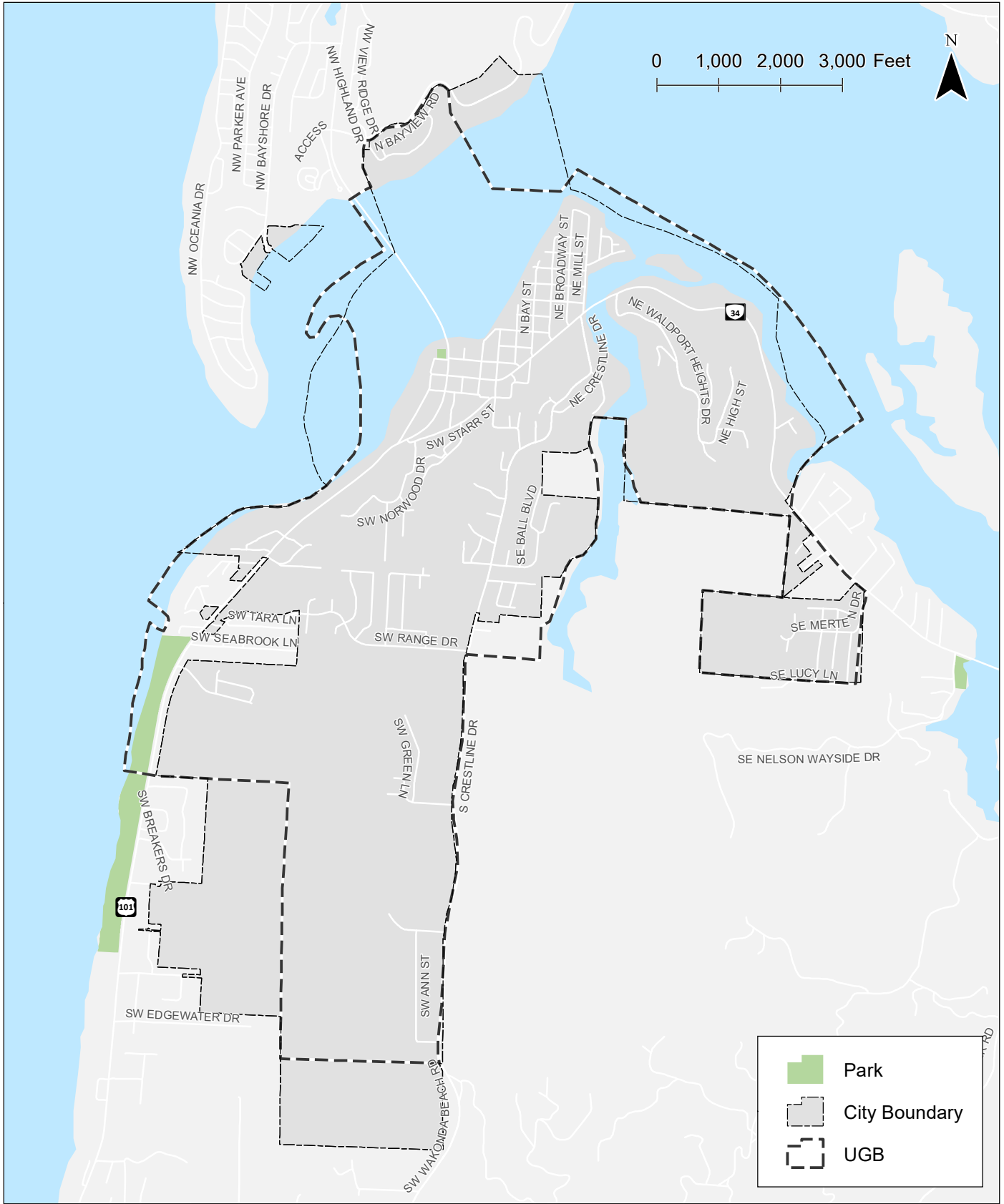
Establishing key destinations or activity centers is an essential step in planning for the future of a city's transportation system. These destinations often include local residential, employment, shopping, schools, civic buildings, recreation, and entertainment. Figure 1 illustrates the city's key destinations used as part of the existing transportation system and future needs analysis as well as the development and prioritization of the multimodal projects. These key destinations include, but are not limited to, the downtown commercial district, the port, and the schools located in the upland area.



US 101 Facing North



OR 34 Facing East



**Study Area
Waldport, Oregon**

**Figure
1**

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TRANSPORTATION PLAN FOCUS AREAS

The following elements are of particular focus in addressing Waldport's transportation system needs.

Pedestrian Plan

- » Provide safe and interconnected pedestrian facilities that encourage people to walk, especially for trips less than one-half mile in length
- » Address gaps and deficiencies in the pedestrian facilities (e.g. sidewalks) that connect residents to schools, parks, churches, etc.
- » Enhanced crossings along major roadways and at major intersections

Bicycle Plan

- » Provide safe and interconnected bicycle facilities that encourage people to ride their bike, especially for trips less than three miles
- » Address gaps and deficiencies in the bicycle facilities (e.g. bike lanes) that connect residents to schools, parks, churches, etc.
- » Enhanced crossings along major roadway and at major intersections

Transit Plan

- » Improve awareness of existing transit facilities and services
- » Improve service hours, frequency of service, and service coverage
- » Improve signage and visibility of transit stops and transit stop amenities

Roadway Plan

- » Address intersections with deficiencies in current or projected future operations
- » Address roadways and intersections with a history of fatal or serious injury crashes
- » Address street connectivity to accommodate future development and overcome environmental and topographical constraints
- » Address designated freight routes or restrictions on freight movements within the city

TSP ORGANIZATION AND METHODOLOGY

The TSP is organized into chapters that address each individual mode of transportation. **Chapter 2** presents the goals and objectives along with the evaluation criteria used to evaluate and prioritize projects and programs in the TSP. **Chapters 3 through 8** present the transportation system improvement projects identified by the project team to address needs in the City's transportation system. **Chapter 9** presents the funding, implementation, and monitoring plan for the TSP update, including existing and potential future funding sources to finance the identified transportation system improvements. **Volume II: Technical Appendix** contains the Technical Memorandums completed throughout the TSP update process, which showcase the inventory, analysis, and project list identification efforts.

TSP UPDATE PROCESS

The TSP update process began with a review of local, regional, and statewide plans and policies that guide land use and transportation planning in the City. Goals and objectives and evaluation criteria were then developed to guide the evaluation of existing and project future transportation system conditions as well as the development of planned improvements. An inventory of the multimodal transportation system was then conducted to serve as the basis for the existing and future conditions analyses. The existing and future conditions analyses focused on identifying gaps and deficiencies in the multimodal transportation system based on current and forecast future performance. For each gap and deficiency, several solutions were then evaluated to address the system needs.

This process led to the development of a large number of potential projects that were then prioritized using the project evaluation criteria and organized into high, medium, and low priority – the high priority projects represent the financially constrained project list, or the list of project expected to be funded over the 20-year horizon. The culmination of the TSP update process is this document, which presents the plans, programs, and projects identified to address the existing and future gaps and deficiencies in the City's transportation system.

COMMITTEES

The TSP update was developed in close coordination with City of Waldport (City) and Oregon Department of Transportation (ODOT) staff along with key stakeholders and representatives from the community. A Project Advisory Committee (PAC) was formed to oversee the TSP update and provide input at each step in the process. The PAC consisted of representatives from the City, the Waldport Planning Commission and City Council, the Port of Alsea, the Sheriff's Department, the Central Coast Fire & Rescue District, and local residents and property owners with an interest in transportation. PAC members reviewed and commented on technical memorandums and participated in committee meetings, community meetings, and workshops. The PAC served as the voice of the community and the caretakers of the goals and objectives of the TSP update.

PUBLIC INVOLVEMENT

Opportunities for public involvement were made available throughout the TSP update process. The opportunities consisted of continuous web-based communications about upcoming committee meetings, community meetings, and work sessions via the project website (www.waldporttsp.com). The project website also included an interactive map that allowed anyone with access to a computer to provide comments to the project team about transportation-related issues within the community. The project team met with the PAC four times throughout the TSP update process. Each PAC meeting was open to the general public. The project team also hosted three virtual community meetings via the project website that offered participants the opportunity to provide input on project materials and share their concerns related to the transportation system. Additionally, the project team met with the Planning Commission and City Council four times throughout the planning process (two joint work sessions and two hearings). Each work session/hearing was open to the general public. The goal of the public involvement process was to develop a TSP update that addressed the gaps and deficiencies in the transportation system while meeting the needs of the community.



Waldport City Hall



Waldport City Hall

LAND USE

Land use plays an important role in developing a comprehensive transportation system. The amount of land that is planned to be developed, the type of land uses, and how the land uses are mixed together have a direct impact on how the transportation system will be used in the future. Understanding land use is critical to taking actions to maintain or enhance the transportation system.

Changes in population, housing, and employment within Waldport's urban growth boundary (UGB) will impact the existing transportation system and create new travel demands. These growth projections and how they translate to new trips on the transportation network were key considerations in the development of the TSP.

POPULATION FORECAST

Projected population information for the communities of Lincoln County, including Waldport, was obtained from the Portland State University Population Research Center (PRC). The PRC generates coordinated forecasts for Oregon counties and cities every four years. The most recent coordinated population forecast for Lincoln County was released in 2017. The 2017 report includes historic and projected population estimates for Lincoln County and Waldport, including estimates for 2017, 2035, and 2067.

Historically, Waldport has grown slower than Lincoln County as a whole; however, projected Average Annual Growth Rates (AARG) for 2017 through 2035 are higher for Waldport than for Lincoln County; 0.9% and 0.6%, respectively. The AARG are forecasted to taper off from 2035 through 2067; 0.7% and 0.4%, respectively. According to the 2017 report, Waldport is expected to capture an increasing share of Lincoln County's total population growth, while the shares for other smaller cities are expected to decline slightly.

EMPLOYMENT FORECAST

Projected employment information for Waldport was obtained from the Census Bureau's Longitudinal Employer-Household Dynamics (LEHD) Origin-Destination Statistics. This data provides a general basis of comparison with the Oregon Employment Department's employment forecast analysis. The data shows that Waldport employed 400 people in the year 2015. Nearly one in four jobs (25.3 percent) were related to retail services. Nearly one in six jobs (17.3 percent) were related to lodging accommodations or food services and another one in six jobs (15.3 percent) were related to educational services.

Waldport is expected to grow by an additional 235 jobs through the year 2027. This assumes that employment growth will follow similar employment trends as forecasted in the State's Industry Employment Forecast and that the City's ongoing efforts to facilitate development of the 161-acre area near the southern City limits will result in new industrial and office-space uses.

Table 1 summarizes the population and employment data for year 2017 and forecast year 2040 conditions. As shown, employment is expected to grow at a higher rate than the population over the 23-year period, primarily due to growth in the Waldport industrial area.

Table 1: Waldport Population, Household, and Employment Summary

Land Use	2017	2040	Change	Percent Change
Population	2,282	2,788	515	22.1%
Households	1,087	1,328	241	22.1%
Employment	400	600	200	50.0%

The population and employment data shown in Table 1 was distributed throughout the City based on current zoning designations and an evaluation of vacant and developable lands. Based on the evaluation, there is currently adequate capacity within the City to accommodate the projected growth in population, households, and employment over the planning horizon without changes to current zoning designations, development patterns, and/or the UGB.

Figures 2 and 3 illustrate the changes in households and employment by Transportation Analysis Zone (TAZ). The TAZs shown in Figures 2 and 3 were developed based on the current zoning designations and the location of major roadways throughout the City. The TAZs provide a convenient way of evaluating and summarizing the population and employment data for the City.

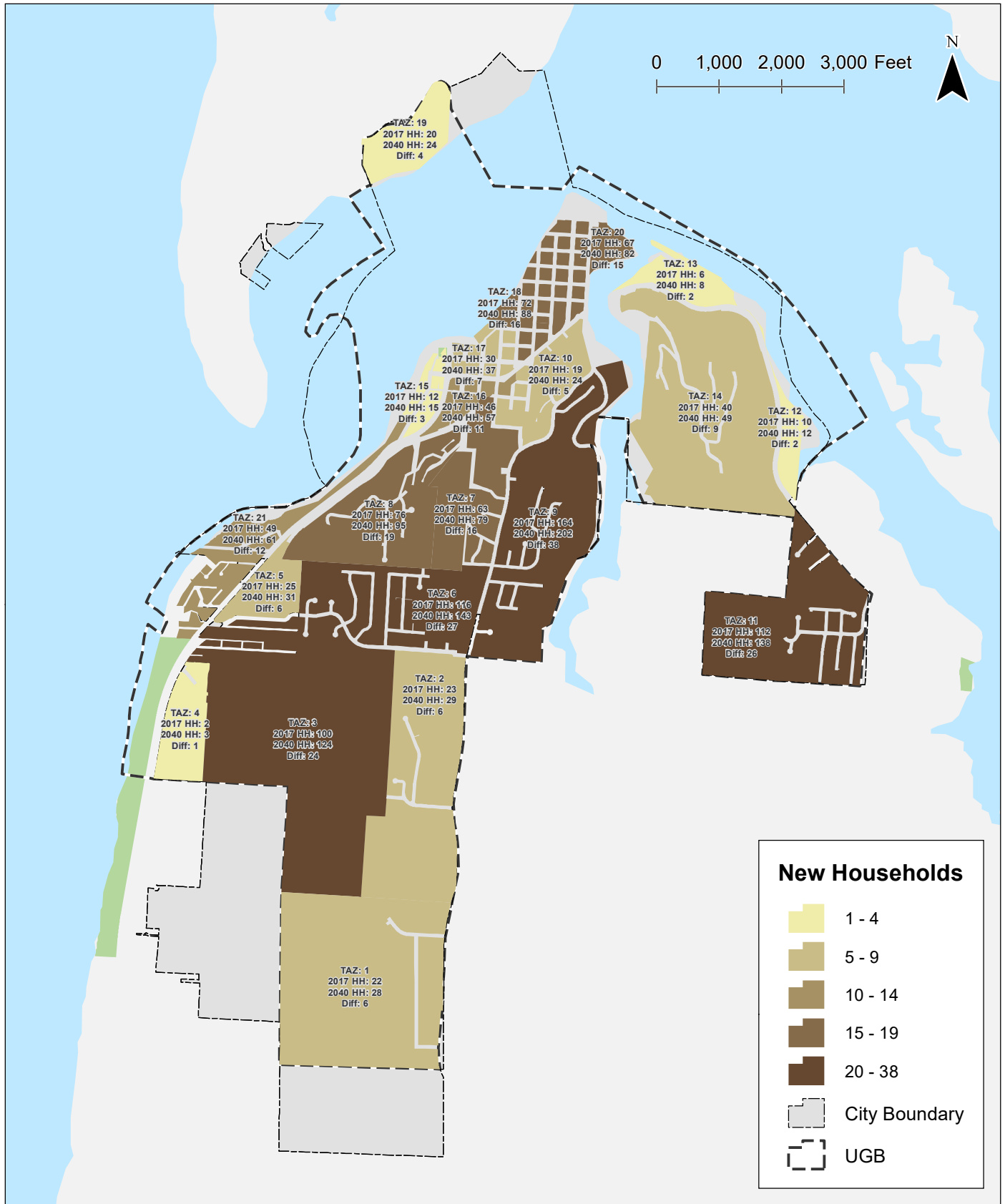
As land uses change in proportion to each other (i.e. there is a significant increase in employment relative to household growth), there will be a shift in the overall operation of the transportation system. Retail land uses generate a higher number of trips per acre of land than residential and other land uses. The location and design of retail land uses in a community can greatly affect transportation system operation. Additionally, if a community is homogeneous in land use character (i.e. all employment or all residential), the transportation system must support significant trips coming to or from the community rather than within the community. Typically, there should be a mix of residential, commercial, and employment type land uses so that some residents may work and shop locally, reducing the need for residents to travel long distances. The data shown in Table 1 indicates that significant growth is expected in Waldport in the coming years, particularly employment opportunities. The transportation system should be monitored to make sure that land uses in the City are balanced with transportation system capacity.



Vacant Property



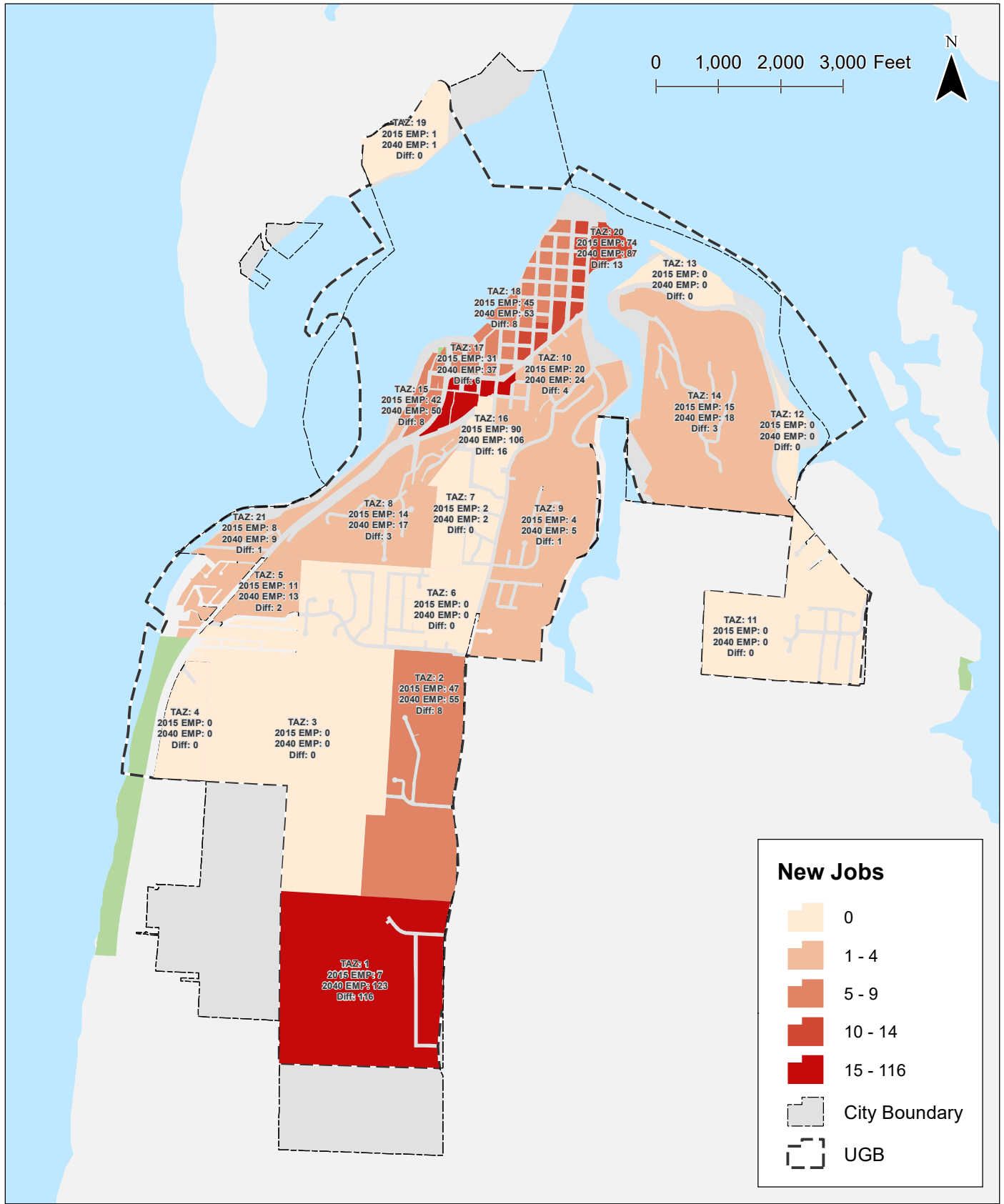
Recent Development



Changes in Households by Transportation Analysis Zone (2017 - 2040) - Waldport, Oregon

Figure 2

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Changes in Employment by Transportation Analysis Zone (2015 - 2040) - Waldport, Oregon

Figure 3

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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 solutions to address the needs, and the selection and prioritization of preferred solutions 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 decision making, such as approval criteria related to zone change and comprehensive plan amendments. The goals and objectives will enable the City to plan for, and consistently work towards, achieving the vision of a connected community.

GOALS AND OBJECTIVES

The goals and objectives were developed based on an evaluation of the goals and policies in the previous Waldport TSP and on information provided in the recently adopted ODOT TSP guidelines. 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 overall guiding principle of the TSP update was to provide and encourage a safe, convenient, and economical transportation system.

GOAL 1. COMMUNICATION, COLLABORATION AND COORDINATION

Develop a transportation system that is consistent with the City's adopted comprehensive plan, Yaquina John Point Land Use and Transportation Plan, Parks Master Plan, and the adopted plans of State, County, and neighboring jurisdictions.

Objectives:

- 1.1 Ensure consistency with state, regional, and local planning rules, regulations, and standards.
- 1.2 Coordinate land use, financial, and environmental planning to prioritize strategic transportation investments.
- 1.3 Coordinate land use and transportation decisions to efficiently use public infrastructure investments to:
 - a. Maintain the mobility and safety of the roadway system
 - b. Foster efficient development patterns
 - c. Encourage the availability and use of transportation options such as biking, walking and taking transit
 - d. Plan for efficient and safe emergency response and evacuation needs

GOAL 2. ACCESS AND CONNECTIVITY

Provide a transportation system that ensures a convenient and accessible network for all modes of travel, including walking, biking, using transit, water trails and driving.

Objectives:

- 2.1 Ensure adequate access to essential destinations throughout Waldport, including facilities and services in the uplands and lowlands.
- 2.2 Support off roadway walkways and bikeways that connect communities, provide options for non-motorized travel, and promote and support walking and biking tourism.
- 2.3 Ensure American Disability Act (ADA) compliance for new transportation facility infrastructure and upgrade existing transportation facilities, when feasible.
- 2.4 Ensure efficient freight movement on identified freight routes.

- 2.5 Support the establishment of designated water trails.

GOAL 3: MOBILITY

Provide a multi-modal transportation system that facilitates efficient and reliable travel and will accommodate future growth.

Objectives:

- 3.1 Preserve and maintain the existing transportation system in a state of good repair.
- 3.2 Ensure that roadways are designed, constructed, and maintained to an appropriate standard for their expected use, vehicle speeds, and vehicle traffic.
- 3.3 Improve the operational and safety components of roads not meeting width or horizontal or vertical alignment standards.
- 3.4 Develop a program to systematically implement improvements for all modes that enhance mobility at designated high-priority locations.
- 3.5 Balance pedestrian and bicycle needs with freight mobility needs through planning and design guidance and coordination.
- 3.6 Plan for efficient and safe multi-modal transportation routes to new growth areas in the City, focusing in particular in connecting the community uses and new employment and residences in South Waldport to the downtown and rest of the City.

GOAL 4. SAFETY AND PREPAREDNESS

Provide a transportation system that ensures safety for all modes and prepares the city to respond and recover from natural hazards and disasters.

Objectives:

- 4.1 Address safety issues at locations with a history of fatal, severe injury, or pedestrian/bicycle-related crashes.
- 4.2 Maintain and enhance lifeline and evacuation routes in coordination with local, regional, state and private entities to prepare for natural disasters.
- 4.3 Engage law enforcement, emergency service providers, and public health professionals in transportation planning to increase public safety and security and to prepare for natural disasters.
- 4.4 Manage access to transportation facilities consistent with their applicable classification to reduce and separate conflicts and provide reasonable access to land uses.
- 4.5 Assess options to reduce traffic volumes and speeds near schools, transit stops, and other essential destinations.
 - a. Work with the school district and educational institutions to identify and implement circulation and access patterns to and around schools that are safe for pedestrians and bicyclists, as well as people in cars and buses.
 - b. Develop Safe Routes to Schools Plan recommendations.

GOAL 5. LIVABILITY, HEALTH, AND RECREATION

Provide a transportation system that preserves a livable community, enhances public health through supporting active transportation, and offers recreational opportunities.

Objectives:

- 5.1 Provide safe, convenient and direct pedestrian and bicycle facilities and routes to promote health and the physical and social well-being of Waldport residents, to reduce vehicular traffic congestion, to

provide transportation and recreational alternatives, and to support multi-modal access to health-supportive goods and services.

- 5.2 Ensure that the transportation system provides equitable multi-modal access for underserved and vulnerable populations to schools, parks, employers, neighborhood commercial centers, health and social services and other essential destinations.
- 5.3 Increase the number of active transportation options available to all members of the community and integrate active transportation options with other modes of travel within the community.
- 5.4 Ensure adequate access for all members of the community to schools, parks, churches, and other essential destinations.
- 5.5 Identify improved multi-modal connections to the Alsea Avenue Open Space site to ensure safe access to and circulation through the area for residents and visitors.
- 5.6 Prioritize solutions that provide safe bicycle and pedestrian access to and within the Lincoln County School District campus and improve vehicular access to the City's elementary, middle, and high schools, as well as the Oregon Coast Community College. Address alternatives and solutions for Crestline Drive improvements to provide access between the school campus, Highway 34, and the upland residential area.

GOAL 6. ENVIRONMENTAL RESOURCES

Provide a transportation system that advances sustainable transportation options and minimizes impacts on the environment and important natural features.

Objectives:

- 6.1 Encourage energy conserving transportation modes.
- 6.2 Avoid or minimize impacts to the scenic, natural, and cultural resources in the City.
- 6.3 Comply with all applicable state and federal noise, air, water, and land quality regulations.
- 6.4 Evaluate and implement, where cost-effective, environmentally friendly materials and design approaches (e.g., water reduction methods to protect waterways, solar infrastructure, impervious materials).

GOAL 7. STRATEGIC INVESTMENT AND ECONOMIC VITALITY

Provide a sustainable transportation system through responsible stewardship of financial resources.

Objectives:

- 7.1 Preserve and protect the function of locally and regionally significant corridors.
- 7.2 Preserve and maintain the existing transportation system assets to extend their useful life.
- 7.3 Identify and maintain stable and diverse revenue sources to meet the need for transportation investments in the City.
- 7.4 Identify new and creative funding sources to leverage high priority transportation projects.
- 7.5 Review and update alternatives for transportation connections to the Waldport Industrial Park and outline the process for new road approvals, acquisitions, funding, design, and construction.

PROJECT SELECTION AND PRIORITIZATION

The selection and prioritization of the projects included in the TSP update was determined based on the project evaluation criteria, which reflect the goals and objectives described above. A qualitative process using the project evaluation criteria was used to evaluate solutions and prioritize projects developed through the TSP update. The rating method used to evaluate the solutions is described below.

- » Most Desirable: The concept addresses the criterion and/or makes substantial improvements in the criteria category. (+2)
- » Desirable: The concept addresses the criterion and/or makes improvements in the criteria category. (+1)
- » No Effect: The criterion does not apply to the concept or the concept has no influence on the criteria. (0)
- » Less Desirable: The concept does not support the intent of and/or negatively impacts the criteria category. (-1)
- » Least Desirable: The concept does not support the intent of and/or substantially negatively impacts the criteria category. (-2)

Table 2 presents the project evaluation criteria that were used to qualitatively evaluate the solutions developed through the TSP update. The initial screening ratings were used to inform discussions about the benefits and tradeoffs of each solution, while the final priorities presented in the following chapters reflect input from the project, advisory committees and the general public.

Table 2: Project Evaluation Criteria

Objective	Evaluation Criteria	Evaluation Score
Goal 1: Communication, Collaboration, and Coordination		
1.1 Ensure consistency with state, regional, and local planning rules, regulations, and standards.	Project is consistent with state, regional, and local plans	+1-2
	Project is not included in any state, regional, or local plans	0
	Project is not consistent with state, regional, or local plans	-1-2
1.2 Coordinate land use, financial, and environmental planning to prioritize strategic transportation investments.	Project coordinates land use, financial, and/or environmental planning	+1-2
	Project does not require coordination	0
	Project conflicts with land use, financial, and/or environmental planning	-1-2
1.3 Coordinate land use and transportation decisions to efficiently use public infrastructure investments.	Project coordinates land use and transportation decisions	+1-2
	Project does not require coordination between land use and transportation	0
	Project creates conflicts with land use and transportation decisions	-1-2
Goal 2: Access and Connectivity		
2.1 Ensure adequate access to essential destinations throughout Waldport, including transit facilities and services.	Project ensures adequate access to essential destinations	+1-2
	Project does not involve access to essential destinations	0
	Project limits access to essential destinations	-1-2
2.2 Support off roadway walkways and bikeways that connect communities, provide	Project supports off-roadway walkways and bikeways	+1-2
	Project does not involve off-roadway walkways or bikeways	0

Objective	Evaluation Criteria	Evaluation Score
options for non-motorized travel, and promote and support walking and biking tourism.	Project limits potential for off-roadway walkways and bikeways	-1-2
2.3 Ensure ADA compliance for new transportation facility infrastructure and upgrade existing transportation facilities, when feasible.	Project ensures ADA compliance for new and improved infrastructure	+1-2
	Project does not involve ADA compliance	0
	Project limits ADA compliance for new and improved infrastructure	-1-2
2.4 Ensure efficient freight movement on identified freight routes.	Project ensures efficient freight movement on identified routes	+1-2
	Project does not involve freight movement or identified freight routes	0
	Project limits freight movement on identified freight routes	-1-2
2.5 Support the establishment of designated water trails.	Project supports designated water trails	+1-2
	Project does not involve water trails	0
	Project limits potential for designated water trails	-1-2
Goal 3: Mobility		
3.1 Preserve and maintain the existing transportation system in a state of good repair.	Project preserves and maintain the existing transportation system	+1-2
	Project does not impact the existing transportation system	0
	Project degrades the existing transportation system	-1-2
3.2 Ensure that roadways are designed, constructed, and maintained to an appropriate standard for their expected use.	Project applies appropriate standard for intended use	+1-2
	Project does not involve appropriate standards	0
	Project does not meet appropriate standards for intended use	-1-2
3.3 Improve the operational and safety components of roads not meeting width or horizontal or vertical alignment standards.	Project improves the operation and/or safety of roads not meeting standards	+1-2
	Project does not impact the operation or safety of roads	0
	Project degrades the operation and/or safety of roads not meeting standards	-1-2
3.4 Develop a program to systematically implement improvements for all modes .that enhance mobility at designated high-priority locations.	Project helps systematically implement improvements	+1-2
	Project does not involve improvements	0
	Project limits the systematic implementation of improvements	-1-2

Objective	Evaluation Criteria	Evaluation Score
3.5 Balance pedestrian and bicycle needs with freight mobility needs through planning and design guidance and coordination.	Project balances pedestrian and bicycle needs with freight needs	+1-2
	Project does not involve pedestrian, bicycle, or freight improvements	0
	Project creates potential conflicts between pedestrian, bicycle and freight	-1-2
3.6 Plan for efficient and safe multi-modal transportation routes to new growth areas	Project provides efficient and safe multimodal transportation route to new growth areas	+1-2
	Project does not involve transportation routes	0
	Project reduces efficiency and safety of existing or planned multi-modal transportation routes to new growth area	-1-2
Goal 4: Safety and Preparedness		
4.1 Address safety issues at locations with a history of fatal, severe injury, or pedestrian/bicycle-related crashes.	Project addresses an existing safety issue	+1-2
	Project does not address an existing safety issue	0
	Project increases potential for safety issues	-1-2
4.2 Maintain and enhance lifeline and evacuation routes in coordination with local, regional, state and private entities to prepare for natural disasters.	Project maintains and enhances lifeline and evacuation routes	+1-2
	Project does not involve lifeline or evacuation routes	0
	Project degrades lifeline or evacuation routes	-1-2
4.3 Engage law enforcement, emergency service providers, and public health professionals in transportation planning to increase public safety and security and to prepare for natural disasters.	Project is supported by law enforcement, emergency service providers, and public health professionals	+1-2
	Project does not impact public safety and security	0
	Project is not supported by law enforcement, emergency service providers and public health professionals	-1-2
4.4 Manage access to transportation facilities consistent with their applicable classification to reduce and separate conflicts and provide reasonable access to land uses.	Project helps manage access to transportation facilities	+1-2
	Project does not address access to transportation facilities	0
	Project provides access inconsistent with its applicable classification	-1-2
4.5 Assess options to reduce traffic volumes and speeds near schools, transit stops, and other essential destinations	Project reduces traffic volumes or speeds near schools, transit stops or other essential destinations	+1-2
	Project does not impact traffic volumes or speeds near schools, transit stops or other essential destinations	0
	Project increases traffic volumes or speeds near schools, transit stops or other essential destinations	-1-2

Objective	Evaluation Criteria	Evaluation Score
Goal 4: Livability, Health, and Recreation		
5.1 Provide safe, convenient and direct pedestrian and bicycle facilities and routes to promote health and the physical and social well-being of Waldport residents.	Project provides safe, convenient, and direct pedestrian or bicycle facilities or routes	+1-2
	Project does not involve pedestrian or bicycle facilities or routes	0
	Project limits safe, convenient, and direct pedestrian or bicycle facilities or routes	-1-2
5.2 Ensure that the transportation system provides equitable multi-modal access for underserved and vulnerable populations to schools, parks, employers, neighborhood commercial centers, health and social services and other essential destinations.	Project improves multi-modal access for underserved and vulnerable populations	+1-2
	Project does not involve underserved and vulnerable populations	0
	Project limits multi-modal access for underserved and vulnerable populations	-1-2
5.3 Increase the number of active transportation options available to all members of the community and integrate active transportation options with other modes of travel within the community.	Project increases the number of active transportation options available to all members of the community	+1-2
	Project does not impact the number of active transportation options available to all members of the community	0
	Project decreases the number of active transportation options available to all members of the community	-1-2
5.4 Ensure adequate access for all members of the community to schools, parks, churches, and other essential destinations.	Project ensures adequate access to schools, parks, churches, and other essential destinations	+1-2
	Project does not involve access to schools, parks, churches, and other essential destinations	0
	Project limits access to schools, parks, churches, and other essential destinations	-1-2
5.5 Identify improved multi-modal connections to the Alsea Avenue Open Space.	Project improves multi-modal connection to the Alsea Avenue Open Space	+1-2
	Project does not involve access to Alsea Avenue Open Space	0
	Project limits multimodal connections to the Alsea Avenue Open Space	-1-2
5.6 Prioritize solutions that improve multi-modal access to local schools.	Project improves multimodal access to local schools	+1-2
	Project does not involve access to local schools	0
	Project limits multi-modal access to local schools	-1-2

Objective	Evaluation Criteria	Evaluation Score
Goal 6. Environmental Resources		
6.1 Encourage energy conserving transportation modes.	Project encourages energy conserving transportation modes	+1-2
	Project does not involve energy conserving transportation modes	0
	Project discourages energy conserving transportation modes	-1-2
6.2 Avoid or minimize impacts to the scenic, natural, and cultural resources in the City.	Project avoids or minimize impacts to scenic, natural, and cultural resources	+1-2
	Project does not involve scenic, natural, and cultural resources	0
	Project impacts scenic, natural, and cultural resources	-1-2
6.3 Comply with all applicable state and federal noise, air, water, and land quality regulations.	Project complies with all applicable state and federal regulations	+1-2
	Project does not involve applicable state or federal regulations	0
	Project defies applicable state and federal regulations	-1-2
6.4 Evaluate and implement, where cost-effective, environmentally friendly materials and design approaches.	Project incorporates environmentally friendly materials	+1-2
	Project does not incorporate environmentally friendly materials	0
	Project cannot incorporate environmentally friendly materials	-1-2
Goal 7. Strategic Investment and Economic Vitality		
7.1 Preserve and protect the function of locally and regionally significant corridors	Project preserves and protects the function of locally and regionally significant corridors	+1-2
	Project does not impact the function of locally and regionally significant corridors	0
	Project degrades the function of locally and regionally significant corridors	-1-2
7.2 Preserve and maintain the existing transportation system assets to extend their useful life	Project preserves and maintain the existing transportation system	+1-2
	Project does not impact the existing transportation system	0
	Project degrades the existing transportation system	-1-2
	Project can be funded through existing funding sources	+1-2
	Project does not require funding	0

Objective	Evaluation Criteria	Evaluation Score
7.3 Identify and maintain stable and diverse revenue sources to meet the need for transportation investments in the County	Project cannot be funded through existing funding sources	-1-2
7.4 Identify new and creative funding sources to leverage high priority transportation projects	Project is eligible for new and/or creative funding	+1-2
	Project does not require funding	0
	Project is not eligible for new and/or creative funding	-1-2
7.5 Review and update alternatives for transportation connections to the Waldport Industrial Park	Project creates new connection to Waldport Industrial Park	+1-2
	Project does not involve a new connection to Waldport Industrial Park	0
	Project limits potential for new connection to Waldport Industrial Park	-1-2

TRANSPORTATION SYSTEM MANAGEMENT AND OPERATIONS PLAN

Transportation System Management and Operations (TSMO) is a set of integrated transportation solutions intended to improve the performance of existing transportation infrastructure. Transportation System Management (TSM) and Transportation Demand Management (TDM) strategies are two complementary approaches to managing and maximizing the efficiency of the transportation system. TSM strategies generally address the *supply* of the system: using strategies to improve efficiency without increasing roadway widths or building new roads. TDM strategies generally address the *demand* on the system: the number of vehicles traveling on the roadways each day.

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 transportation 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 Waldport, including: traffic signal timing and phasing optimization at the US 101/OR 34 intersection, real-time traveler information along US 101 and OR 34, 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 policy tool as well as a general term used to describe any action that removes single occupant vehicle trips from the roadway during peak travel demand periods. As growth in the City occurs, the number of vehicle trips and travel demand in the area will also increase. The ability to change a user's travel behavior and provide alternative mode choices will help accommodate this potential growth in trips. TDM strategies include alternative or flexible work schedules, ridesharing/carpooling, transit use, walking and bicycling, parking management, and telecommuting. The primary focus on TDM measures are on major employers; however, there are a number of TDM strategies that can be applied in Waldport, including: provision of sidewalks and bicycle lanes that provide residents with the ability to travel on foot or by bike; local transit facilities and services that provide residents with the ability to travel by bus, and development patterns that encourage non-auto-oriented travel. Several of these strategies are included in other elements of the TSP.

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 and improve neighborhood livability. NTM solutions have been implemented in locations throughout the city; however, there are many areas where additional NTM could be considered in the future. Table 3 lists several common NTM options that are typically supported by emergency response as long as minimum street criteria are met.

Table 3: 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) and are accepted and field tested
Raised Median Island	Supported	Supported	
Pavement Texture	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	
Diverter	Not Supported	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 show in Table 3, several NTM solutions are limited to local streets; implementation of these NTM solutions on arterial and collector streets is counterproductive and can lead to cut through traffic on local streets. These NTM solutions are also restricted on arterial and collector streets to avoid conflicts with emergency access/public safety as well as conflicts with freight traffic and public transit. While no specific NTM projects are identified in the TSP, they are an important part of the City's ongoing effort to improve livability. Any future NTM projects should be coordinated with emergency service providers to ensure public safety is not compromised.

PARKING MANAGEMENT

Parking management is an important element of TDM, and effective management of parking resources can encourage use of non-single occupancy vehicle modes. The City can develop and implement parking policies and strategies that establish truck loading zones, taxi zones, valet zones, and/or transitional spaces; impose time limits and on-street parking restrictions for RV's, trucks with trailers, and other large vehicles; establish public/private partnerships to identify additional public and employee parking, and; update the development code to allow shared parking and encourage development within the downtown area. The City can also monitor public parking supply and utilization in order to inform future parking strategy.

TSMO PLAN PROJECTS

Table 4 summarizes the TSMO Plan Projects for the Waldport TSP. Given the limited experience with TSMO strategies, it is important that decision-makers understand their long-term costs and benefits and are able to 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 4: TSMO Plan Projects

Map ID	Name	Description	Priority	Cost Estimate
N/A	Parking Management	Develop a parking management plan for downtown Waldport	Medium	\$50,000
Total Low Priority Project Costs				\$0
Total Medium Priority Project Costs				\$50,000
Total High Priority Project Costs				\$0
Total TSMO Plan Project Costs				\$50,000

ACCESS MANAGEMENT

Access management is a set of measures regulating access to streets, roads, and highways, from public roads and private driveways. Access management is a policy tool which seeks to balance mobility, the need to provide efficient, safe and timely travel with the ability to allow access to individual properties. Proper implementation of access management techniques could result in reduced congestion, reduced crash rates, less need for roadway widening, conservation of energy, and reductions in air pollution. Measures may include but are not limited to restrictions on the type and amount of access to roadways, and use of physical controls, such as signals and channelization including raised medians, to reduce impacts of approach road traffic on the main facility.

ODOT and the City have adopted access spacing standards for the study area roadways. The following summarizes ODOT's access spacing standards, as defined in Oregon Administrative Rule (OAR) 734 Division 51, and the City's access spacing standards.

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 Oregon Highway Plan (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 Waldport, US 101 is classified as a Statewide Highway, it has posted speed limits that range from 25 to 55 mph, and it has AADT volumes that range from 9,100 toward the north end of the City to 6,400 toward the south. OR 34 is classified as a District Highway, it has posted speed limits that range from 25 to 45 mph, and it has AADT volumes that range from 5,200 near US 101 to 4,300 toward the east city limits. Table 5 summarizes ODOT's current access spacing standards for US 101 and OR 34 in Waldport.

Table 5: ODOT Access Spacing Standards

Posted Speed (MPH)	US 101 (Feet) ¹	OR 34 (Feet) ¹	
		>5,000 AADT	<5,000 AADT
≤ 25	350	250	150
30 and 35	500	350	250
40 and 45	800	500	360
50	1,100	550	425
≥ 55	1,320	700	650

¹These access spacing standards do not apply to approaches in existence prior to April 1, 2000 except as provided in OAR 734-051-0115(1)(c) and 734-051-0125(1)(c).

CITY ACCESS SPACING STANDARDS

Access spacing standards for approaches to City streets are based on the roadway functional classification. Table 6 identifies the City's access spacing standards, including the minimum and maximum block sizes for public streets and the minimum driveway spacing for public streets and private driveways. These standards will help preserve transportation system investments and guard against deteriorations in safety and increased congestion.

Table 6: Access Spacing Standards

Functional Classification	Mixed-use or Residential			Commercial or Industrial		
	Max Block Size (Street to Street) ¹	Min Block Size (Street to Street)	Min Dwy Spacing (Street to Dwy & Dwy to Dwy) ²	Max Block Size (Street to Street) ¹	Min Block Size (Street to Street)	Min Dwy Spacing (Street to Dwy & Dwy to Dwy) ²
Collector	530 feet	300 feet	100 feet	530 feet	300 feet	150 feet
Local Street	530 feet	150 feet	50 feet	530 feet	150 feet	50 feet

1. If the maximum block size is exceeded, mid-block pedestrian and bicycle accessways must be provided at spacing of no more than 330 feet, unless the connection is impractical due to existing development, topography, or environmental constraints.
2. Single family and two-family dwellings are exempt from the driveway to driveway spacing standards.

In cases where physical constraints or unique site characteristics limit the ability for the access spacing standards listed in Table 6 to be met, the City retains the right to grant an access spacing variance.

ACCESS SPACING VARIANCES

Access spacing variances may be provided to parcels whose highway/street frontage, topography, or location would otherwise preclude issuance of a conforming permit and would either have no reasonable access or cannot obtain reasonable alternate access to the public road system. In such a situation, a conditional access permit may be issued by ODOT or the City, as appropriate, for a connection to a property that cannot be accessed in a manner that is consistent with the spacing standards. The permit can carry a condition that the access may be closed at such time that reasonable access becomes available to a local public street. The approval condition might also require a given land owner to work in cooperation with adjacent land owners to provide either joint access points, front and rear cross-over easements, or a rear access upon future redevelopment.

The requirements for obtaining a deviation from ODOT's minimum spacing standards are documented in OAR 734-051-3050. For streets under the City's jurisdiction, the City may reduce the access spacing standards at the discretion of the City Engineer if the following conditions exist:

- ▶ Joint access driveways and cross access easements are provided in accordance with the standards;
- ▶ The site plan incorporates a unified access and circulation system in accordance with the standards;
- ▶ The property owner enters into a written agreement with the City that pre-existing connections on the site will be closed and eliminated after construction of each side of the joint use driveway; and/or,
- ▶ The proposed access plan for redevelopment properties moves in the direction of the spacing standards.

The City Engineer may modify or waive the access spacing standards for streets under the City's jurisdiction where the physical site characteristics or layout of abutting properties would make development of a unified or shared access and circulation system impractical, subject to the following considerations:

- ▶ Unless modified, application of the access standard will result in the degradation of operational and safety integrity of the transportation system.
- ▶ The granting of the variance shall meet the purpose and intent of these standards and shall not be considered until every feasible option for meeting access standards is explored.
- ▶ Applicants for variance from these standards must provide proof of unique or special conditions that make strict application of the standards impractical. Applicants shall include proof that:
 - Indirect or restricted access cannot be obtained;
 - No engineering or construction solutions can be applied to mitigate the condition; and,
 - No alternative access is available from a road with a lower functional classification than the primary roadway.

No variance shall be granted where such hardship is self-created. Consistency between access spacing requirements and exceptions in the TSP and the municipal code is an important regulatory solution to be addressed as part of this TSP update.

Access Consolidation

From an operational perspective, access management measures limit the number of redundant access points along roadways. This enhances roadway capacity, improves safety, and benefits circulation. Enforcement of the access spacing standards should be complemented with provision of alternative access points. Purchasing right-of-way and closing driveways without a parallel road system and/or other local access could seriously affect the viability of the impacted properties. Thus, if an access management approach is taken, alternative access should be developed to avoid “land-locking” a given property.

As part of every land use action, the City should evaluate the potential need for conditioning a given development proposal with the following items in order to maintain and/or improve traffic operations and safety along the arterial and collector roadways.

- ▶ Providing access only to the lower classification roadway when multiple roadways abut the property.
- ▶ Provision of crossover easements on all compatible parcels (considering topography, access, and land use) to facilitate future access between adjoining parcels.
- ▶ Issuance of conditional access permits to developments having proposed access points that do not meet the designated access spacing policy and/or have the ability to align with opposing driveways.
- ▶ Right-of-way dedications to facilitate the future planned roadway system in the vicinity of proposed developments.
- ▶ Half-street improvements (sidewalks, curb and gutter, bike lanes/paths, and/or travel lanes) along site frontages that do not have full build-out improvements in place at the time of development.

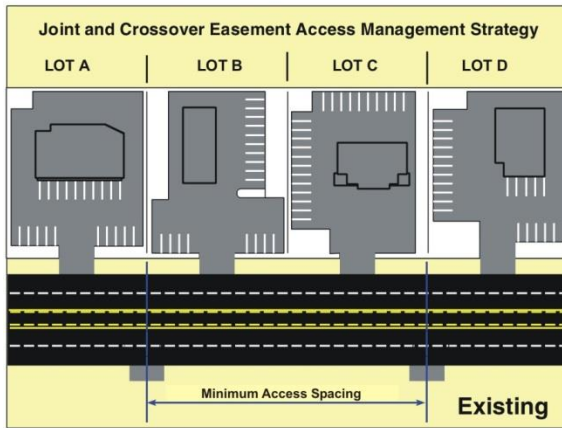
Exhibit 3 illustrates the application of cross-over easements and conditional access permits over time to achieve access management objectives. The individual steps are described in Table 7. As illustrated in the exhibit and supporting table, by using these guidelines, all driveways along the highways can eventually move in the overall direction of the access spacing standards as development and redevelopment occur along a given street.

Table 7: Example of Crossover Easement/Indenture/Consolidation

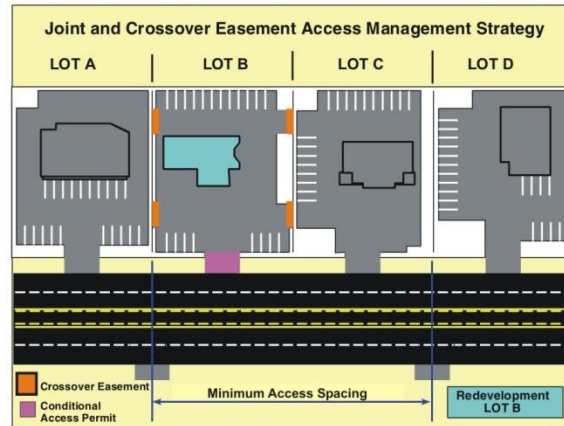
Step	Process
1	EXISTING – Currently Lots A, B, C, and D have site-access driveways that neither meet the access spacing criteria of 500 feet nor align with driveways or access points on the opposite side of the highway. Under these conditions motorists are into situations of potential conflict (conflicting left turns) with opposing traffic. Additionally, the number of side-street (or site-access driveway) intersections decreases the operation and safety of the highway
2	REDEVELOPMENT OF LOT B – At the time that Lot B redevelops, the City would review the proposed site plan and make recommendations to ensure that the site could promote future crossover or consolidated access. Next, the City would issue conditional permits for the development to provide crossover easements with Lots A and C, and ODOT/City would grant a conditional access permit to the lot. After evaluating the land use action, ODOT/City would determine that LOT B does not have either alternative access, nor can an access point be aligned with an opposing access point, nor can the available lot frontage provide an access point that meets the access spacing criteria set forth for segment of highway.
3	REDEVELOPMENT OF LOT A – At the time Lot A redevelops, the City/ODOT would undertake the same review process as with the redevelopment of LOT B (see Step 2); however, under this scenario ODOT and the City would use the previously obtained cross-over easement at Lot B consolidate the access points of Lots A and B. ODOT/City would then relocate the conditional access of Lot B to align with the opposing access point and provide and efficient access to both Lots A and B. The consolidation of site-access driveways for Lots A and B will not only reduce the number of driveways accessing the highway, but will also eliminate the conflicting left-turn movements the highway by the alignment with the opposing access point.
4	REDEVELOPMENT OF LOT D – The redevelopment of Lot D will be handled in same manner as the redevelopment of Lot B (see Step 2)
5	REDEVELOPMENT OF LOT C – The redevelopment of Lot C will be reviewed once again to ensure that the site will accommodate crossover and/or consolidated access. Using the crossover agreements with Lots B and D, Lot C would share a consolidated access point with Lot D and will also have alternative frontage access the shared site-access driveway of Lots A and B. By using the crossover agreement and conditional access permit process, the City and ODOT will be able to eliminate another access point and provide the alignment with the opposing access points.
6	COMPLETE – After Lots A, B, C, and D redevelop over time, the number of access points will be reduced and aligned, and the remaining access points will meet the access spacing standard.

Exhibit 6: Cross Over Easement

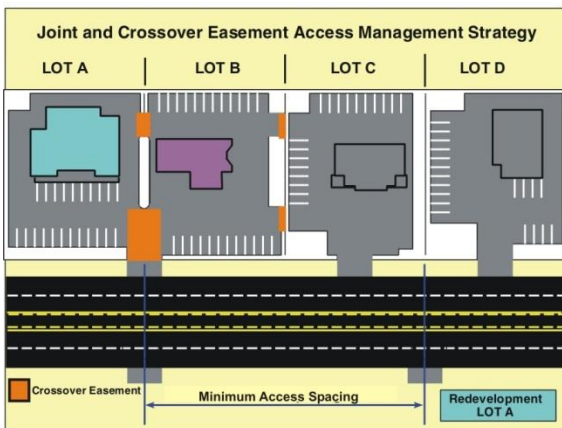
Proposed Access Management Strategy



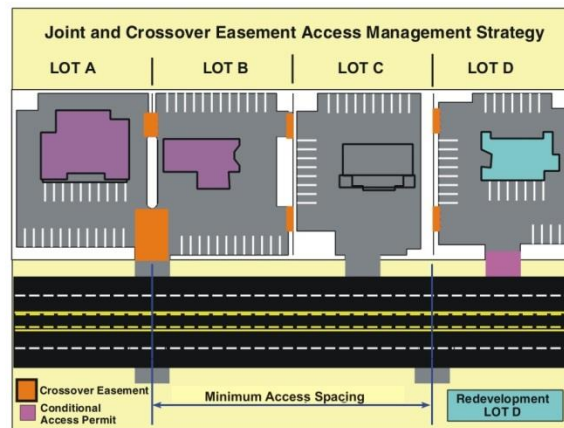
Step 1



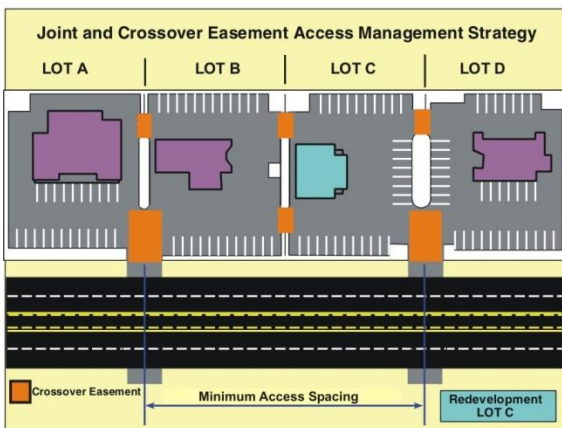
Step 2



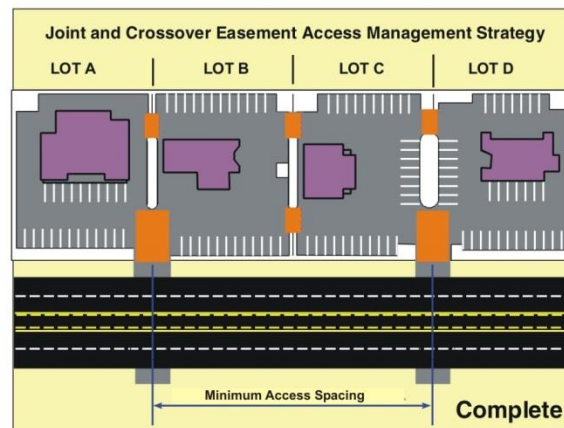
Step 3



Step 4



Step 5



Step 6

PEDESTRIAN PLAN

Pedestrian facilities within Waldport consists of sidewalks, shared-use paths, and off-street trails, as well as marked and unmarked, signalized and unsignalized pedestrian crossings. These facilities provide residents with the ability to travel between residential areas, schools, parks, churches, retail/commercial centers, recreational areas, and other key destinations within Waldport by foot. A safe, convenient, and continuous network of pedestrian facilities is essential to establishing a vibrant and healthy community while supporting the local economy within the City.

Sidewalks are currently provided along both sides of US 101 and OR 34 within the downtown area. Sidewalks are also provided along one or two sides of several streets throughout the City. Therefore, the pedestrian plan includes projects to fill-in the gaps in the sidewalk network along the city's arterial and collector streets and a few local streets that provide access to essential destinations such as schools, parks, churches, etc. The pedestrian plan also includes enhanced pedestrian crossings along several major roadways. Subsequent sections of the TSP include multi-use paths and trails that augment and support the pedestrian system.

PEDESTRIAN FACILITIES

Pedestrian facilities are the elements of the transportation system that enable people to walk safely and efficiently between neighborhoods, retail centers, employment areas, and transit stops. These include facilities for pedestrian movement along key roadways (e.g., sidewalks, multi-use paths, and trails) and for safe roadway crossings (e.g., crosswalks, flashing beacons, pedestrian refuge islands). Each facility plays an important role in developing a comprehensive pedestrian system. This section identifies the pedestrian facilities include in the TSP to improve access and circulation for pedestrians.

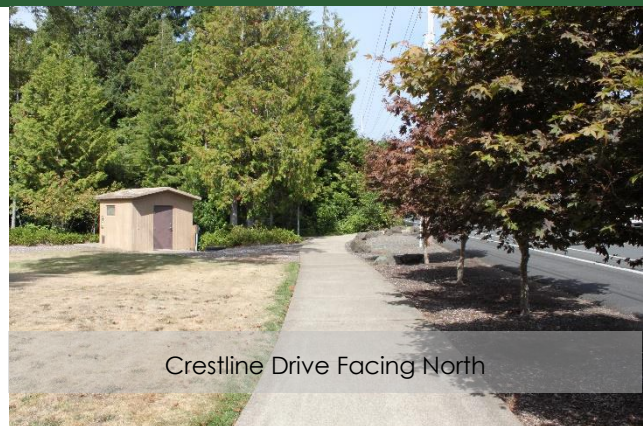
SIDEWALKS

Sidewalks are the fundamental building blocks of the pedestrian system. They enable people to walk comfortably, conveniently, and safely from place to place. They also provide an important means of mobility for people with disabilities, families with strollers, and others who may not be able to travel on an unimproved roadside surface.

Sidewalks



US 101 Facing South



Crestline Drive Facing North

Sidewalks are usually 6 to 8-foot wide and constructed from concrete. They are also frequently separated from the roadway by a curb, landscaping, and/or on-street parking. Sidewalks are widely used in urban and suburban settings. Ideally, sidewalks could be provided on both sides of the roadway; however, some areas with physical or right-of-way constraints may require that sidewalk be located on only one side.

ENHANCED PEDESTRIAN CROSSINGS

Enhanced pedestrian crossings enable pedestrians to safely cross streets, railroad tracks, and other transportation facilities. Planning for appropriate pedestrian crossings requires the community to balance vehicular mobility needs with providing crossing locations along the desired routes of walkers. Enhanced pedestrian crossing treatments include curb extensions, raised median islands, high visibility pavement markings and signs, flashing beacons, pedestrian signals, pedestrian 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.

Enhanced Pedestrian Crossings



Enhanced pedestrian crossings typically include high visibility pavement markings and signs that indicate the location of the crosswalk. Enhanced crossings can be accompanied by curb extensions, raised median islands, and/or flashing beacons. They may occur at intersections or at mid-block locations.

As travel speeds and traffic volume increase more protection for pedestrians is necessary. Certain facilities that attract pedestrian like transit stops, parks, schools, and public buildings may benefit from enhanced pedestrian crossings regardless of traffic speeds or volume.

Rectangular Rapid Flashing Beacon (RRFB)



RRFBs are user-actuated amber lights that have an irregular flash pattern similar to emergency flashers on police vehicles. These supplemental warning lights are used at unsignalized intersections or mid-block crosswalks when warranted to improve safety for pedestrians using a crosswalk.

PEDESTRIAN PLAN PROJECTS

Table 8 identifies the pedestrian plan projects for the Waldport TSP update. As shown, the projects are separated into projects along street segments and at intersections. The priorities shown in Table 8 are based on the project evaluation criteria and input from the project team, advisory committee, and the general public. The cost estimates are based on average unit costs for similar roadway improvements. The cost estimates do not include right-of-way. Figure 4 illustrates the location of the pedestrian plan projects.

Table 8: Pedestrian Plan Projects

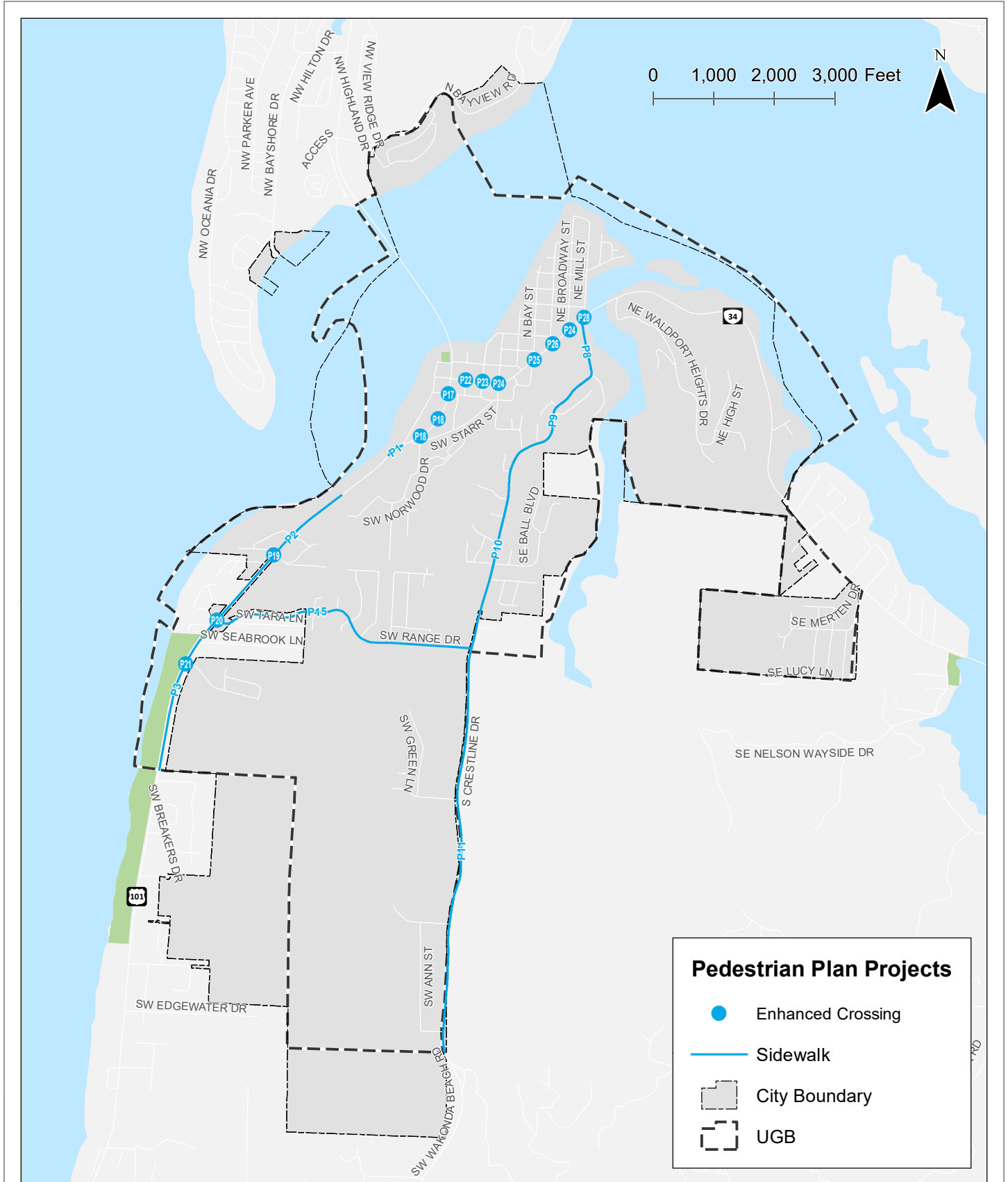
Map ID	Location	Project	Priority	Cost
Street Segments				
P1	US 101	Install 6-foot sidewalks on both sides of the roadway from Maple Street to the Seawall	High	\$15,000 ¹
P2	US 101	Install 6-foot sidewalks on both sides of the roadway from the Seawall to Range Drive	Medium	\$115,000 ¹
P3	US 101	Install 6-foot sidewalks on both sides of the roadway from Range Drive to the south city limits	Low	\$130,000 ¹
P4 ²	US 101	Install street lighting at regular intervals from Maple Street to Range Drive	High	\$40,000 ¹
P5 ²	US 101	Install street lighting at regular intervals from Range Drive to the south city limits	Low	\$30,000 ¹
P6 ²	OR 34	Install pedestrian-scale lighting from US 101 to Mill Street	High	\$25,000 ¹
P7 ²	OR 34	Install street lighting at regular intervals from Mill Street to the east city limits	Medium	\$55,000 ¹
P8	Crestline Drive	Install a 6-foot sidewalk on the east side of the roadway from OR 34 to Lint Slough Road	Medium	\$215,000
P9	Crestline Drive	Install a 6-foot sidewalk on the west side of the roadway from Lint Slough Road to Cedar Street	Low	\$0 ²
P10	Crestline Drive	Install 6-foot sidewalks on both sides of the roadway from Cedar Street to Range Drive	Medium	\$1,555,000
P11	Crestline Drive	Install a 6-foot sidewalk on the west side of the roadway from Range Drive to the south city limits	Low	\$1,540,000
P12 ²	Crestline Drive	Install street lighting at regular intervals from OR 34 to Range Drive	Medium	\$60,000
P13 ²	Crestline Drive	Install street lighting at regular intervals from Range Drive to the south city limits	Low	\$65,000
P14 ²	Cedar Street	Install street lighting at regular intervals from OR 34 to Crestline Drive	Medium	\$120,000
P15	Range Drive	Install 6-foot sidewalks on both side of the roadway from US 101 to Crestline Drive	Medium	\$1,025,000
P16 ²	Range Drive	Install street lighting at regular intervals from US 101 to Crestline Drive	Medium	\$45,000

Map ID	Location	Project	Priority	Cost
Intersections				
P17	US 101/ Willow Street	Enhance existing crossing with Rectangular Rapid Flashing Beacons (RRFBs)audible push buttons ³	High	\$5,000 ¹
P18	US 101/Mid- block Crossing (2-locations)	Enhance existing crossings with raised median islands and pedestrian refuges in the center two-way left-turn lane – Coordinate with Project A6; additional pedestrian crossing signs in the raised median islands; and RRFBs with audible push buttons ³	High	\$30,000 ¹
P19	OR 34/ Forestry Way	Install an enhanced crossing on the south leg of the intersection when warranted ³	Low	\$15,000 ¹
P20	OR 34/ Range Drive	Install an enhanced crossing on the south leg of the intersection when warranted ³	Low	\$15,000 ¹
P21	OR 34/ Ocean Hills	Install an enhanced crossing on the south leg of the intersection when warranted ³	Low	\$15,000 ¹
P22	OR 34/ Verbena Street	Enhance the existing crossing with high visibility pedestrian crossing signs and curb extensions ³	High	\$5,000 ¹
P23	OR 34/ John Street	Enhance the existing crossing with high visibility pedestrian crossing signs and curb extensions ³	High	\$5,000 ¹
P24	OR 34/ Cedar Street	Enhance the existing crossing with high visibility pedestrian crossing signs and curb extensions ³	High	\$5,000 ¹
P25	OR 34/ Bay Street	Enhance the existing crossing with high visibility pedestrian crossing signs ³	High	<\$5,000 ¹
P26	OR 34/ Commerce Street	Install an enhanced crossing on the east leg of the intersection when warranted ³	High	\$5,000 ¹
P27	OR 34/ Broadway	Install an enhanced crossing on the east leg of the intersection when warranted ³	High	\$5,000 ¹
P28	OR 34/ Crestline Drive	Install high visibility pedestrian crossing signs on both sides of the crossings and in both directions ³	High	<\$5,000 ¹
Total Low Priority Project Costs				\$1,810,000
Total Medium Priority Project Costs				\$3,190,000
Total High Priority Project Costs				\$150,000
Total Pedestrian Plan Project Costs				\$5,150,000

1. The cost reflects the City's likely contribution (10%) to the overall project cost.

2. This project is not shown on the Map

3. Installation of enhanced crossings requires coordination with ODOT on the location and type of crossing treatments.



**Pedestrian Plan Projects
Waldport, Oregon**

**Figure
4**

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SAFE ROUTES TO SCHOOL PLAN

Safe Routes to School (SRTS) is a program aimed at making it safer for students to walk, bike, or take public transit to school. Waldport does not have a SRTS program; however, there are elements of a SRTS plan in place, such as pedestrian and bicycle facilities along Crestline Drive, Range Drive and other roadways around local schools and active monitoring of traffic conditions. While no specific SRTS projects are identified for the TSP update, the City should collaborate with the Lincoln County School District and local schools to develop and implement other elements of a SRTS plan, including:

- ▶ Develop education and encouragement programs that provide students and residents with information on transportation options and generate excitement and interest in walking and biking.
- ▶ Continue to implement physical improvements to the transportation system aimed at addressing specific needs which make walking and biking to school safer, more comfortable and convenient.
 - Several projects are identified within the pedestrian and bicycle sections of this memorandum that could help the city further enhance the transportation system around school. The projects include pedestrian and bicycle improvements along Crestline Drive and Range Drive and several multi-use path and trail projects located north, east, and west of Waldport schools.
- ▶ Develop an evaluation program that assesses which strategies and approaches are successful, ensures that initiatives support equitable outcomes, and identifies unintended consequences or opportunities.
- ▶ Develop an equity program that ensures that program initiatives are benefiting all demographic groups.

BICYCLE PLAN

Bicycle facilities within Waldport consist of shared roadways and shoulder bikeways as well as off-street bicycle facilities, such as bicycle parking. These facilities provide residents with the ability to travel between residential areas, schools, parks, churches, retail/commercial centers, recreational areas, and other key destinations within Waldport and neighboring cities by bicycle. A safe, convenient, and continuous network of bicycle facilities is essential to establishing a vibrant and healthy community while supporting the local economy within the City.

US 101 and OR 34 are considered shared roadways within the downtown area. Shoulder bikeways are provided along US 101 and OR 34 outside the downtown area and along one or two sides of several streets throughout the City. Therefore, the bicycle plan includes several projects along the city's arterial and collector streets and a few local streets that provide direct access to key destinations. The bicycle plans also includes several enhanced bicycle crossings as well as other off-street amenities that augment and support the bicycle system.

BICYCLE FACILITIES

Bicycle facilities are the elements of the transportation system that enable people to travel safely and efficiently by bicycle. These include facilities along key roadways (e.g. shared lane pavement markings, on-street bike lanes, buffered bike lanes, and separated bike lanes) and facilities at key crossing locations (e.g., enhanced bike crossings). These also include end of trip facilities (e.g. bike parking, changing rooms, and showers at worksites); however, these facilities are typically addressed through the development code. Each facility plays an important role in developing a comprehensive bicycle system.

Shared Lane Pavement Markings



Sharrows are shared lane pavement markings that indicate a shared space for motorists and cyclists. They are typically centered in the travel way or located four feet from the edge of the travel way approximately 50 to 250-feet apart depending on traffic volumes. Sharrows are suitable on roadways with relatively low travel speeds (<25 mph) and traffic volumes (<2,500 ADT); however, they may be used to transition between discontinuous bicycle facilities along roadways with higher speeds and volumes.

On-Street Bike Lanes



On-street bike lanes are striped lanes on the roadway dedicated for the exclusive use of cyclists. On-street bike lanes are typically placed at the outer edge of pavement (but to the inside of right-turn lanes and/or on-street parking). On-street bike lanes can improve safety and security of cyclists and (if comprehensive) can provide direct connections between origins and destinations.

Buffered Bike Lanes



Buffered bike lanes are enhanced versions of conventional 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 the comfort of bicycling.

Separated Bike Lanes



Separated bike lanes (often called "cycle tracks") are bike lanes that are physically separated from motor vehicle traffic by a vertical element such as a planter, flexible post, parked car, or a mountable curb. One-way separated bike lanes are typically found on each side of the street, like conventional bike lanes, while two-way separated bike lanes are typically found on one side of the street.

Enhanced Bicycle Crossings



Enhanced bicycle crossings enable cyclists to safely and efficiently cross streets and other transportation facilities. Planning for appropriate enhanced bicycle crossings requires the community to balance vehicular mobility needs with providing crossing locations along the desired routes of cyclists. Enhanced bicycle crossings include:

- » Bike boxes
- » Left-turn bike boxes
- » Pavement markings
- » Bike only signals
- » Bicycle detection

Wayfinding Signs



Wayfinding signs are physical signs or travel lane markings located along roadways or at intersections that direct cyclists between destinations along low-stress routes. Wayfinding signs help inexperienced and/or less confident cyclists overcome perceived barriers by identifying lower speed and lower volume routes that do not require a bicycle facility. They typically include distances and average walk/cycle times. Wayfinding signs are generally used along bicycle routes and multi-use paths.

Bicycle Parking

Short-Term



Short-term bicycle parking is designed to meet the needs of cyclists visiting businesses, institutions, and other destinations where visits typically last up to two hours. Short-term bicycle parking must be readily accessible, visible, and self-explanatory.

Long-Term



Long-term bicycle parking places an emphasis on security, weather protection and is designed to meet the needs of cyclists who may leave their bicycle unattended for several hours or more. Long-term bicycle parking is typically located at residences or apartment buildings, workplaces, transit centers, and other routinely visited destinations.

Bicycle parking is a vital component of a city's bicycle system and can be provided in a variety of sizes, shapes, and unique pieces of infrastructure that resemble the city's character.

BICYCLE PLAN PROJECTS

Table 9 identifies the bicycle plan projects for the Waldport TSP update. As shown, the projects are separated into projects along street segments and at intersections. The priorities shown in Table 9 are based on the project evaluation criteria and reflect input from the project team, advisory committee, and the general public. The cost estimates are based on average unit costs for similar roadway improvements. The cost estimates do not include right-of-way. Figure 5 illustrates the location of the bicycle plan projects.

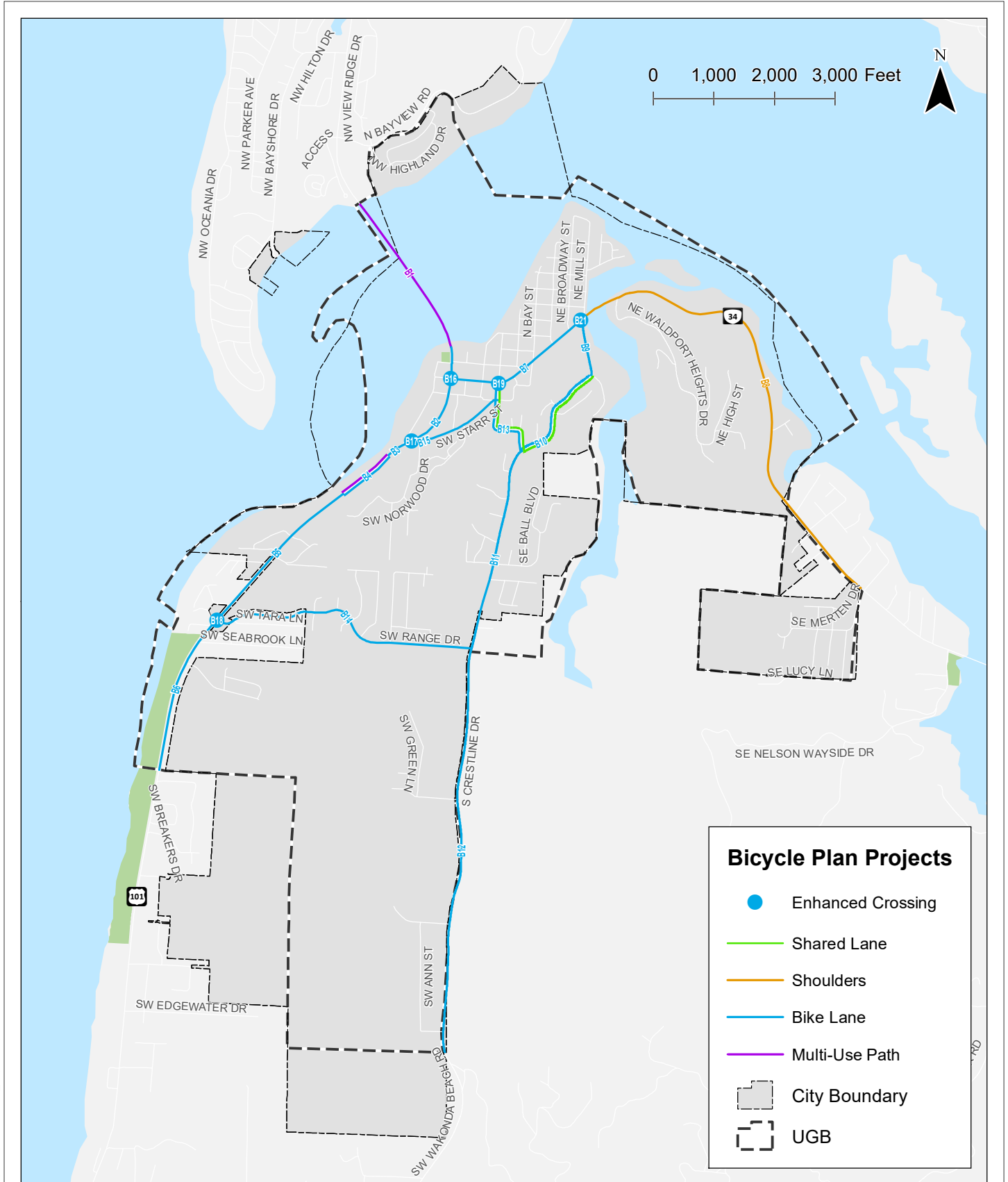
Table 9: Bicycle Plan Projects

Map ID	Location	Project	Priority	Cost
Street Segments				
B1	US 101	Install 10-foot multi-use paths on both sides of the Alsea Bridge	Medium	\$190,000 ¹
B2	US101	Install 6-foot bike lanes on both sides of the roadway from the Alsea Bridge to Maple Street – coordinate with Project A6	High	0 ^{1,2}

Map ID	Location	Project	Priority	Cost
B3	US 101	Install 6-foot bike lanes on both sides of the roadway from Maple Street to the Seawall	High	<\$5,000 ¹
B4	US101	Install a 10-foot multi-use path on the west side of the roadway and a 6-foot bike lane on the east side of the roadway along the Seawall ³	High	\$85,000 ¹
B5	US 101	Install 6-foot bike lanes on both sides of the roadway from the Seawall to Range Drive	Medium	\$45,000 ¹
B6	US 101	Install 6-foot bike lanes on both sides of the roadway from Range Drive to the south city limits	Low	\$55,000 ¹
B7	OR 34	Install 6-foot bike lanes on both sides of the roadway from US 101 to Mill Street	High	\$5,000 ¹
B8	OR 34	Install 6-foot shoulders on both sides of the roadway from Mill Street to east city limits	Medium	\$105,000 ¹
B9	Crestline Drive	Install a 6-foot bike lane on the east side of the roadway from OR 34 to Lint Slough Road	Medium	\$340,000
B10	Crestline Drive	Install shared lane pavement markings (sharrows) and signs in the northbound (downhill) direction and a 6-foot bike lane in the southbound (uphill) direction from Lint Slough Road to Cedar Street	Low	\$1,005,000
B11	Crestline Drive	Install 6-foot bike lanes on both sides of the roadway from Cedar Street to Range Drive	Medium	\$1,420,000
B12	Crestline Drive	Install 6-foot bike lanes on both sides of the roadway from Range Drive to the south city limits	Low	\$1,765,000
B13	Cedar Street	Install shared lane pavement markings (sharrows) and signs in the northbound (downhill) direction and install a 6-foot bike lane in the southbound (uphill) direction	Medium	\$345,000
B14	Range Drive	Install 6-foot bike lanes on both sides of the roadway from US 101 to Crestline Drive	Medium	\$1,875,000
B15	Starr Street	Install 6-foot bike lanes on both sides of the roadway from US 101 to Cedar Street	Low	\$740,000
Intersections				
B16	US 101/ OR 34	Install skip striping along US 101 with green paint in the conflict areas ⁴	High	<\$5,000 ¹
B17	US 101/ Starr Street	Install skip striping along US 101 with green paint in the conflict areas ⁴	High	<\$5,000 ¹

Map ID	Location	Project	Priority	Cost
B18	US 101/ Range Drive	Install an enhanced bicycle crossing with median refuge island on US 101 at Range Drive ⁴	Medium	\$15,000 ¹
B19	OR 34/ Cedar Street	Install skip striping along OR 34 with green paint in the conflict areas ⁴	High	<\$5,000 ¹
B20	OR 34/ Cedar Street	Install an enhanced bicycle crossing with supplemental signs on OR 34 at Cedar Street ⁴	High	\$5,000 ¹
B21	OR 34/ Crestline Drive	Install skip striping along OR 34 through the intersection with green paint in the conflict areas ⁴	High	<\$5,000 ¹
B22	OR 34/ Crestline Drive	Install an enhanced bicycle crossing with supplemental signs on OR 34 at Crestline Drive ⁴	High	<\$5,000 ¹
Total Low Priority Project Costs				\$3,565,000
Total Medium Priority Project Costs				\$4,335,000
Total High Priority Project Costs				\$125,000
Total Bicycle Plan Project Costs				\$8,025,000

1. The cost reflects the City's likely contribution (10%) to the overall project cost.
2. The cost is included in the roadway plan.
3. The 6-foot bike lane on the east side of the roadway may not be feasible, and therefore may be limited to a four-foot shoulder or eliminated during the design process.
4. Installation of enhanced crossings requires coordination with ODOT on the location and type of crossing treatments.



Bicycle Plan Projects

- Enhanced Crossing
- Shared Lane
- Shoulders
- Bike Lane
- Multi-Use Path
- City Boundary
- UGB

**Bicycle Plan Projects
Waldport, Oregon**

**Figure
5**

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MULTI-USE PATH AND TRAILS PLAN

There are several existing multi-use paths and trails located throughout Waldport that augment and support the pedestrian and bicycle systems. The following identifies the location of several new multi-use paths and trails as identified in the Waldport Parks, Recreation & Trails Master Plan and the Yaquina John Point Land use and Transportation Plan. Additional multi-use paths and trails identified through the TSP update are also provided below.

MULTI-USE PATH AND TRAIL FACILITIES

Multi-use paths and trails are improved (i.e. paved) and unimproved (i.e. dirt and gravel) facilities that serve pedestrians and bicyclists. Multi-use paths and trails can be constructed adjacent to roadways where topography, right-of-way, or other issues don't allow for the construction of sidewalks and bike facilities. A minimum width of 10 feet is recommended in areas with low levels of pedestrian/bicycle traffic (8-feet on constrained areas); 12 feet should be considered in areas with moderate to high levels of pedestrian/bicycle traffic. Multi-use paths and trails can be used to create longer-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.



Multi-use paths and trails create circulation and connection systems for non-motorized travelers. These paths and trails provide recreational opportunities for residents and visitors and connect the lowland and upland areas of the city. They can be used for commuting, recreation, and for evacuation.

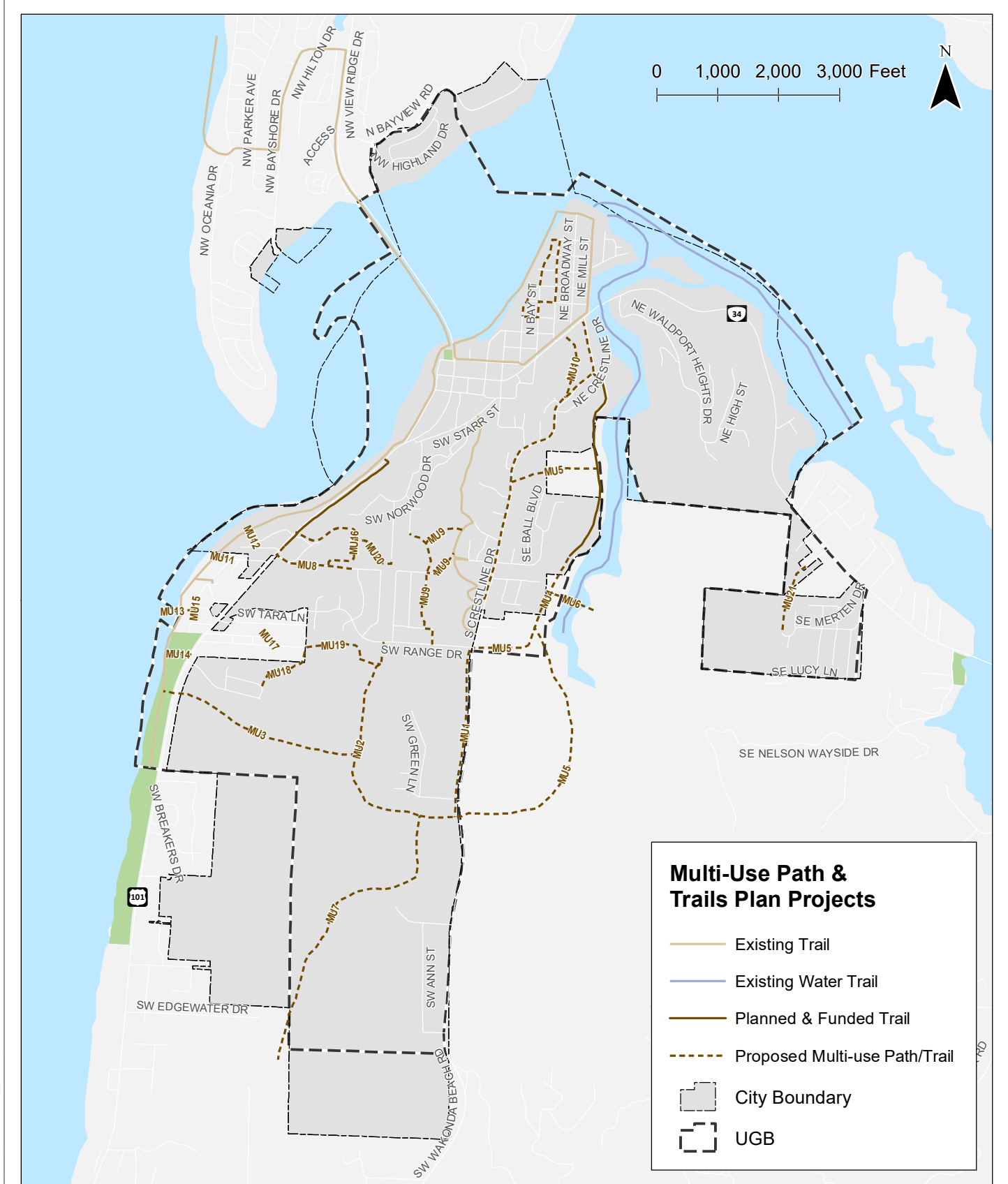
MULTI-USE PATH AND TRAIL PROJECTS

Table 10 identifies the multi-use path and trail plan projects for the Waldport TSP update. The priorities shown in Table 10 are based on the project evaluation criteria and reflect input from the project team, advisory committee, and the general public. The cost estimates are based on average unit costs for similar roadway improvements. The cost estimates do not include right-of-way. Figure 6 illustrates the location of the multi-use path and trails plan projects.

Table 10: Multi-use Path and Trails Plan Projects

Map ID	Location	Project	Priority	Cost
MU1	Crestline Trail	Install a multi-use path or trail along the west side of Crestline Drive that connects the Waldport School campus to Range Drive	High	\$140,000
MU2	Crestview Golf Club Trail	Install a multi-use path or trail west of the Crestview Golf Club that connects the Waldport School campus to Range Drive	Medium	\$185,000
MU3	Range Drive Trail	Install east-west oriented multi-use paths or trails south of Range Drive that connect US 101 to the trail between the Waldport School campus and Range Drive	Medium	\$170,000
MU4	Lint Slough Trail Extension	Extend the Lint Slough Trail south to align with Range Drive	Medium	\$80,000
MU5	Lint Slough Trail (West)	Install multi-use path or trail connections from the Lint Slough Trail west to Crestline Drive between Cedar Street and Crestline Park, to Range Drive, and to Crestline Drive near the Waldport School campus	Medium	\$380,000
MU6	Lint Slough Trail (East)	Install a multi-use path or trail from the Lint Slough Trail to the east	Low	\$40,000
MU7	Little Creek Trail	Install a multi-use path or trail from the school campus south along the Little Creek Tributary	Low	\$260,000
MU8	Forestry Lane Trail	Install trails east from the Bridgeview Trail and along Forestry Lane	Low	\$75,000
MU9	Cedar Heights Park Trail	Install Trails connecting the Woodland Trail to Range Drive through the Land & Sea and Cedar Heights Park subdivisions	Low	\$170,000
MU10	Former School Site Trail	Install a multi-use path or trail connecting OR 34 to Crestline Drive through the open space site (former high school property)	High	\$55,000
MU11	Corona Beach Access	Improve/sign existing access trail to beach from Corona Court	Medium	\$10,000
MU12	Wazyata Beach Access	Improve/sign existing access trail to beach from Wazyata Avenue	Medium	\$10,000
MU13	Sherwood Beach Access	Improve/sign existing access trail to beach from Sherwood Lane	Medium	\$15,000
MU14	State Park Beach Access	Improve/sign existing access trail to beach from state park	Medium	\$10,000

Map ID	Location	Project	Priority	Cost
MU15	Seawoods Terrace to Sherwood Lane Trail Connection	Improve/sign existing access trail to beach from Seawoods Terrace to Sherwood Lane	Medium	\$10,000
MU16	Forest Service North Multi-Use Path to US 101	Install multi-use path to connect with Norwood Drive extension (S4) to US 101	Medium	\$70,000
MU17	Southmayd Lane to Seabrook Lane Trail	Improve existing trail on city easement from eastern terminus of Southmayd Lane to Seabrook Lane	Low	\$20,000
MU18	Sailfish Loop to Seabrook Lane Nature Trail	Improve/sign existing nature trail from Sailfish Loop to Seabrook Lane	Medium	\$65,000
MU19	Seabrook Lane to Range Drive Nature Trail	Improve/sign existing nature trail from Seabrook Lane to Range Drive	Medium	\$125,000
MU20	Skyline Drive Trail	Improve/sign existing nature trail from Skyline Drive south terminus to 500' westward	Medium	\$30,000
MU21	Merten Drive Trail	Install a multi-use path or trail connecting Clover Lane to Merten Drive	High	\$60,000
			Total Low Priority Project Costs	\$565,000
			Total Medium Priority Project Costs	\$1,150,000
			Total High Priority Project Costs	\$255,000
			Total Multi-use Path and Trails Plan Project Costs	\$1,970,000



**Multi-Use Path and Trails Plan Projects
Waldport, Oregon**

**Figure
6**

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TRANSIT PLAN

Public transit in Waldport is currently provided by Lincoln County Transportation Service District's (LCTSD) South County Route (Newport to Yachats) and the Caravan Airport Shuttle. The Transit Plan includes projects to enhance existing fixed-route service provided by LCTSD as well as identify new service within Waldport. These projects are intended to improve connections and services to local and regional destinations. Public transit complements walking, bicycling, and driving trips: users can walk or bike to transit stops or drive to park-and-ride locations to access long-distance destinations. The Transit Plan will require coordination with LCTSD and others to improve service for Waldport residents.

TRANSIT FACILITIES AND SERVICES

TRANSIT SERVICE

Fixed-route transit is provided in Waldport along US 101 and OR 34 via Lincoln County Transportation Service District's (LCTSD) South County Route (Newport to Yachats). The route operates along US 101 between Newport and Yachats. OR 34 is served by a spur of the route, which turns around at the Lakeside Market on-call stop east of Waldport. The route operates Monday through Saturday between 7:00 a.m. and 6:30 p.m. with four daily trips. The LCTSD fare schedule is based on designated services zones; each travel zone is \$1.00. This route spans three service zones (Zones 1, 2, and 3) for a maximum one-way fare of \$3.00.

The Caravan Airport Shuttle also provides service in Waldport. The route operates between the Waldport Visitor Center and Portland International Airport, providing connections to Lincoln City, Grand Ronde, OHSU/VA, and Portland Amtrak. The route provides one daily trip, departing Waldport Visitor Center at 7:50 a.m. and departing from Portland for the return trip at 2:15 p.m. Reservations are required and a one-way ticket costs approximately \$75.00. Additional charges are applicable for pets, oversized items, additional baggage, or bicycles.

TRANSIT STOPS

LCTSD serves seven bus stops in Waldport, five of which are on-call or as-needed (Waldport Post Office, Lakeside Market, Waldport Library, Waldport Clinic, Espresso 101) and two of which are regular bus stops (Hi-School Pharmacy, Ray's Market). Unless a stop is arranged at the Lakeside Market or Waldport Clinic, the South County Route will not serve OR 34 east of Crestline Drive or Range Drive, respectively. The Waldport Post Office bus stop provides a shelter. The Caravan Airport Shuttle serves one stop in Waldport at the Visitor Center.

PARATRANSIT (DIAL-A-RIDE) SERVICE

No dial-a-ride service is currently provided in Waldport. However, the South County Route will deviate up to $\frac{3}{4}$ mile if requested. In addition, LCTSD's 2018 Transit Development Plan (TDP) identified several potential improvements to the South County Route as well as other transit facilities and services in Waldport, including short-term actions (five-year horizon, 2023) and medium-term actions (ten-year horizon, 2028). For new services, the TDP recommends extending dial-a-ride to new service areas within Lincoln County based on LCTSD and community recommendations and available funding. The TDP notes that funding partnerships with cities newly served by dial-a-ride would make the service feasible and provides the total cost per year as \$216,800 with a capital cost of two vehicles in the medium-term.

TRANSIT PLAN PROJECTS

The projects identified in Table 11 consider projects identified in LCTSD's TDP and input received throughout the Waldport TSP update process. The priorities shown in Table 11 are based on the project evaluation criteria and were updated based on input from the project team, advisory committee, and the general public. The cost estimates are based on average unit costs for similar transit improvements. Figure 7 illustrates the location of the transit plan projects.

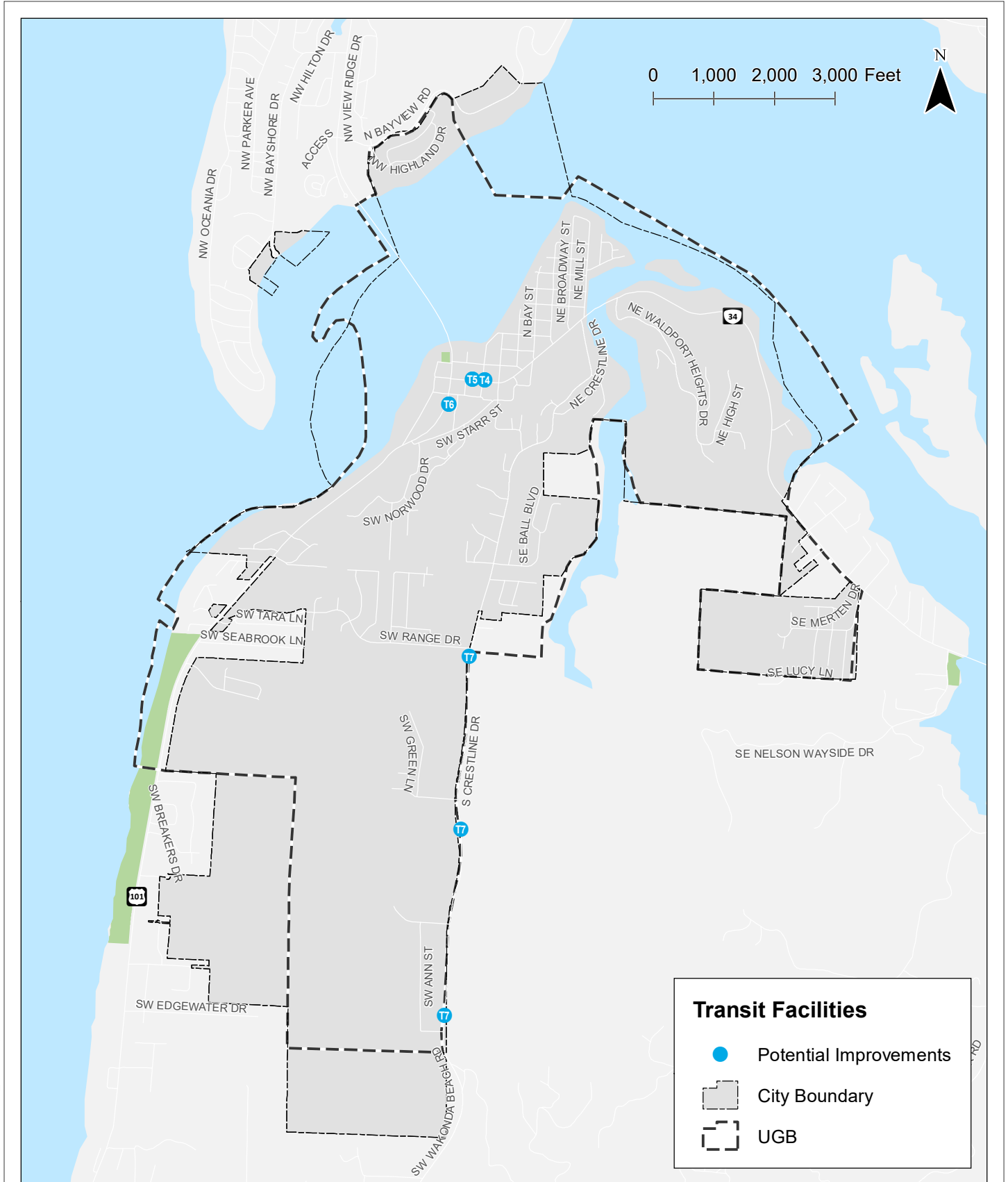
Table 11: Transit Plan Projects

Map ID	Location	Project	Priority	Cost Estimate
T1 ²	City-wide	Increase South County route frequency	Medium	\$0 ¹
T2 ²	City-wide	Increase South County route service hours	Medium	\$0 ¹
T3 ²	City-wide	Provide dial-a-ride service in Waldport, includes two New Buses to be funded by others	Medium	\$10,000 ³
T4	OR 34/NW John Street	Relocate Waldport Library Stop to Dollar General and install bus shelter	Medium	\$10,000
T5	OR 34/NW Verbana Street	Install bus shelter at Waldport Library stop	Medium	\$10,000
T6	Along US 101 and OR 34	Install benches at Espresso 101, Hi-School Pharmacy, Ray's Market, and Lakeside Market stops	Medium	\$5,000
T7 ²	Crestline Drive	Install bus stops on Crestline Drive should South County Route be rerouted. Potential locations include industrial-zoned lands, schools, and Crestview Golf Club	Medium	\$5,000
Total High Priority Project Costs				\$0
Total Medium Priority Project Costs				\$40,000
Total Low Priority Project Costs				\$0
Total Transit Plan Project Costs				\$40,000

1. Project to be funded by others.

2. Project not shown on map.

3. Project to be partially funded by others.



Transit Facilities

- Potential Improvements
- City Boundary
- UGB

**Transit System Plan
Waldport, Oregon**

**Figure
7**

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ROADWAY PLAN

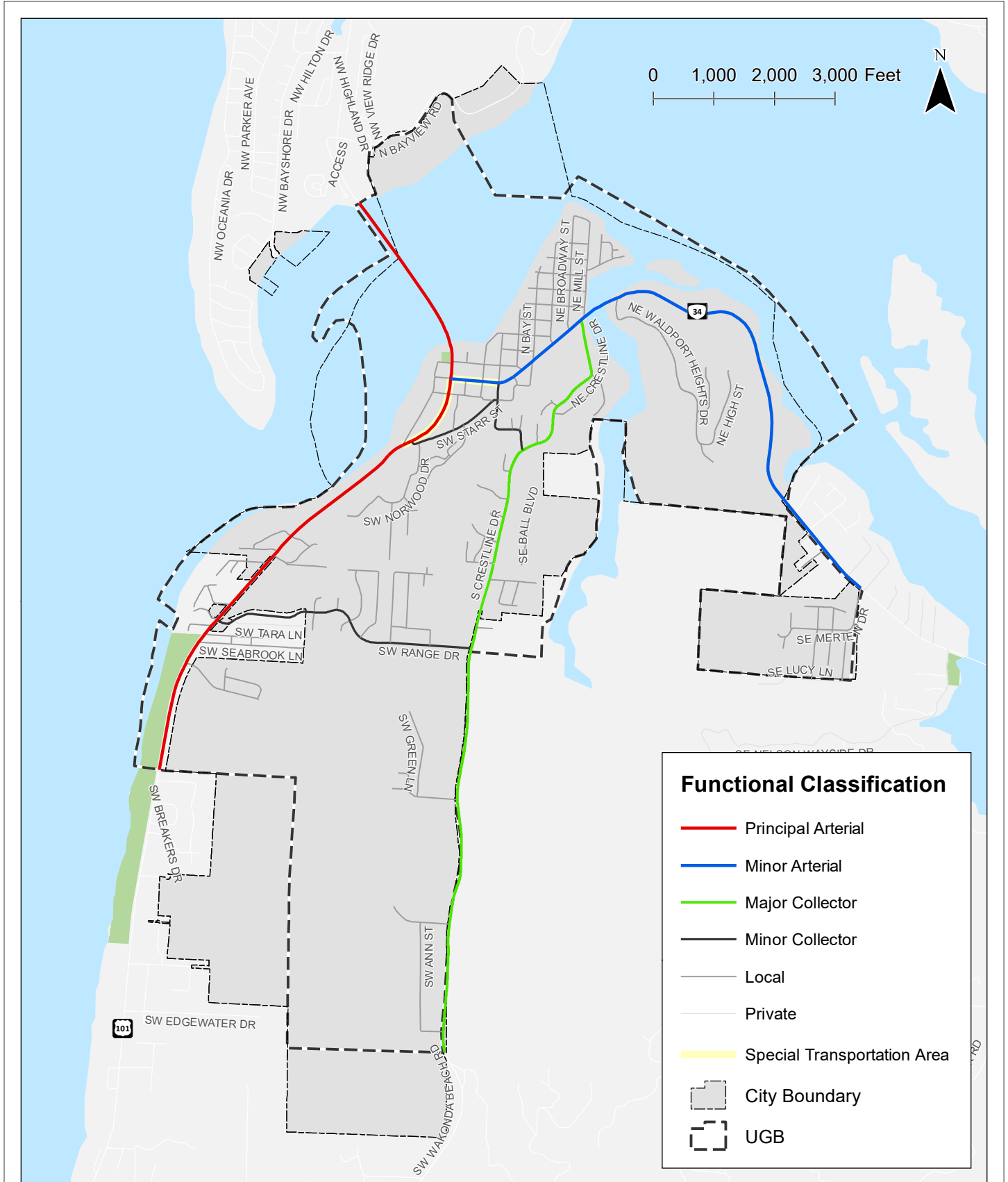
The roadway system within Waldport consists of two state highways (US 101 and OR 34) and several city streets. The streets located east of US 101 and north of OR 34 are based on a grid system while the streets located throughout the rest of the city reflect natural, environmental, and topographical constraints. There are several areas throughout the city where existing roadways could be improved and where new roadways could be constructed to increase the efficiency of the transportation system as well as improve access and circulation for all travel modes. The roadway plan includes projects to increase the efficiency of the transportation system through changes in the functional classification of roadways, development of roadway standards and standard cross sections, and improvements in connectivity and capacity.

FUNCTIONAL CLASSIFICATION PLAN

A street's functional classification defines its role in the transportation system and reflects desired physical and operational characteristics such as right-of-way requirements, pavement widths, pedestrian and bicycle features, and driveway (access) spacing standards. Figure 8 illustrates the functional classification of streets within Waldport. The following provides a description of each functional classification.

- ▶ **Principal Arterials** – The primary function of a principal arterial is providing connections between regional centers. Principal arterials serve the highest traffic volumes over the greatest distances and often at the highest speeds. The only principal arterial in Waldport is US 101.
- ▶ **Minor Arterials** – The primary function of a minor arterial is to augment and support the principal arterial system and provide connections to smaller geographic areas. Minor arterials serve somewhat lower traffic volumes as compared to principal arterials over moderate distances. The only minor arterial in Waldport is OR 34.
- ▶ **Collectors** – The primary function of a collector is gathering traffic from local streets and funneling it to the arterial system. The primary difference between major and minor collectors is major collectors are often longer, have higher traffic volumes and travel speeds, provide fewer access points, and are spaced at greater intervals than minor collectors. The only major collector in Waldport is Crestline Drive. Minor collectors include Cedar Street, Range Drive, and Starr Street.
- ▶ **Local Streets** – The primary function of a local street is to provide access to individual properties. The remaining streets in Waldport, not identified as arterials or collectors, are considered local streets. Local streets can be further classified as local commercial and local residential streets according to the adjacent land uses.

Table 12 summarizes the functional classification of the arterial and collector streets in Waldport and identifies the overlapping ownership/maintenance and jurisdictional relationships that exist.



Functional Classification
Waldport, Oregon

Figure
8

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Table 12: Functional Classification Comparison of Collector and Higher Streets by Jurisdiction

Roadway	Jurisdiction	Functional Classification		
		Federal	State	City
US 101	ODOT	Principal Arterial	Statewide	Principal Arterial
OR 34	ODOT	Minor Arterial	District	Minor Arterial
Crestline Drive	City	Major Collector	N/A	Major Collector
Range Drive	City	Minor Collector ¹	N/A	Minor Collector
Cedar Street	City	Minor Collector ¹	N/A	Minor Collector
Starr Street	City	Minor Collector ¹	N/A	Minor Collector

1. Pending approval by ODOT.

SPECIAL TRANSPORTATION AREA

In addition to the functional classifications identified above, the segment of US 101 from OR 34 to SW Maple Street and the segment of OR 34 from US 101 to Cedar Street are designated as a Special Transportation Areas (STA). An 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 state designated freight routes where through highway mobility has greater importance.

FREIGHT ROUTE DESIGNATIONS

There are no state designated freight routes in Waldport. The closest state designated freight route is US 20 that travels east from Newport to OR 99W in Corvallis. The Motor Carrier Transportation Division (MCTD), which is a division of ODOT that promotes a safe, efficient, and responsible commercial transportation industry, identifies US 101 as an Orange Route and OR 34 as a Black and Yellow Route. Per the MCTD:

- ▶ **Orange Routes** are generally unrestricted freight and oversize/overweight routes. They are among the most heavily used truck routes in the state. They are also the most viable routes for an unrestricted detour.
- ▶ **Black and Yellow Routes** are highly restricted to truck and oversize load traffic. They may be important for local access by permit, but not for general use. These routes should not be considered as viable routes for unrestricted detours.

There are no local designated freight routes in Waldport. Crestline Drive and Range Drive currently provide access for trucks to the commercial and industrial properties in the upland area and therefore, experience higher heavy vehicle volumes. However, as described below, three new street connections are included in the motor vehicle plan to improve access between US 101 and the commercial and industrial properties in the upland areas. Construction of these streets could reduce truck traffic along Crestline Drive and Range Drive in the future.

STREET DESIGN STANDARDS

Street design standards are intended to maintain consistency in the construction of city streets. Tables 13 and 14 identify the street design standards by functional classification. Additional information on street design standards is included in the Waldport Development Code.

Table 13: Street Design Standards

Functional Classification	Right of Way (ft)	Surface Width (ft)	Travel Lane (ft)	Median/ Turn Lane (ft)	Parking Lane (ft)	Bike Lane/ Shoulder (ft)	Side-walk (ft)	Land-scape (ft)
Principal Arterial	80	30-60	11-12	13-14	7-8 ¹	6	6; 10 ¹	0-4 ²
Minor Arterial	80	34-50	11-12	13-14	7-8 ¹	6	6; 10 ¹	0-4 ²
Major Collector	60	26-47	10-11	12-13	None	6	6	0-4
Minor Collector	60	26-47	10-11	12-13	None	6	6	0-4
Local Street	50-60	20-36	10-11	None	7-8	None	6	0-4

- 1. Applicable in commercial areas.
- 2. Tree wells/planter boxes are sufficient in commercial areas.

Table 14: Street Design Standards

Functional Classification	Surface Type	Base Depth	Max Grade	Design Speed	Min Tangent	Min Curve	Curb Type
Principal Arterial	Note #2	Note #3	6%	Note #2	Note #2	Note #2	Note #2
Minor Arterial	Note #2	Note #3	6%	Note #2	Note #2	Note #2	Note #2
Major Collector	3" AC	8"	15%	Note #3	Note #3	Note #3	Note #3
Minor Collector	3" AC	8"	15%	Note #3	Note #3	Note #3	Note #3
Local Street	3" AC	6"	15%	Note #3	Note #3	Note #3	Note #3

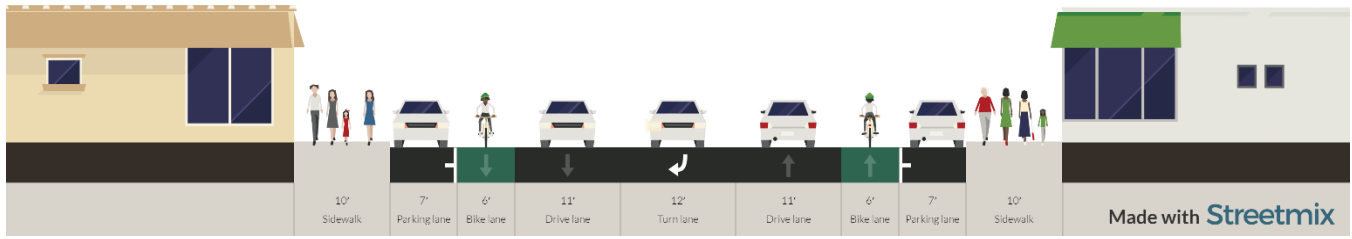
- 1. Design shall be in accordance with Oregon Department of Transportation Design Standards.
- 2. Design shall be in accordance with American Association of State Highway Transportation Official standards.

ROADWAY CROSS SECTIONS

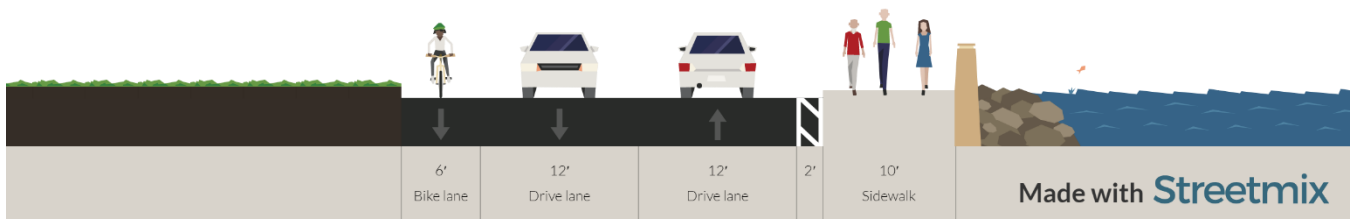
The design of a roadway can (and will) vary from street to street and segment to segment due to natural, environmental, and topographical constraints as well as adjacent land use and demand. The roadway cross sections are intended to define a system that allows standardization of key characteristics to provide consistency, but also to provide criteria for applications that provide some flexibility while meeting the design standards. Exhibits 1 through 5 illustrate the cross sections for each functional classification.

Unless prohibited by significant natural, environmental, and/or topographical constraints, 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 existing development constraints where determined to be appropriate. 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.

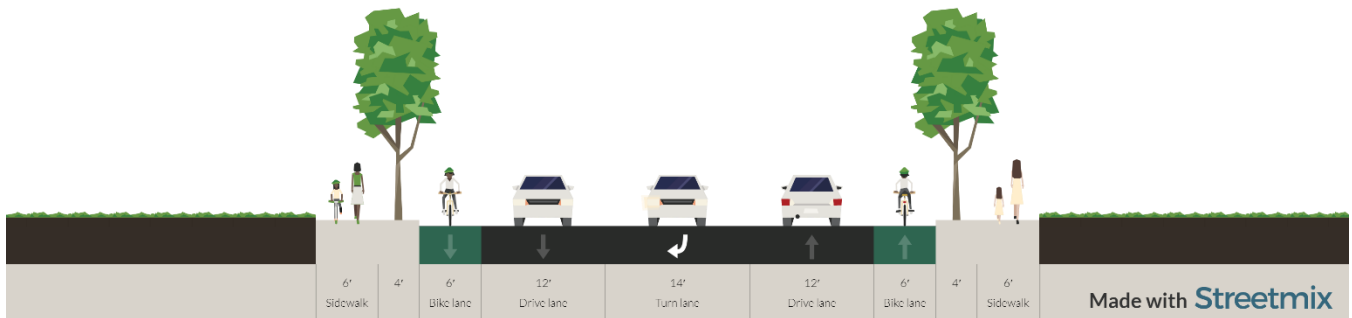
Exhibit 1: Principal Arterial Cross Sections



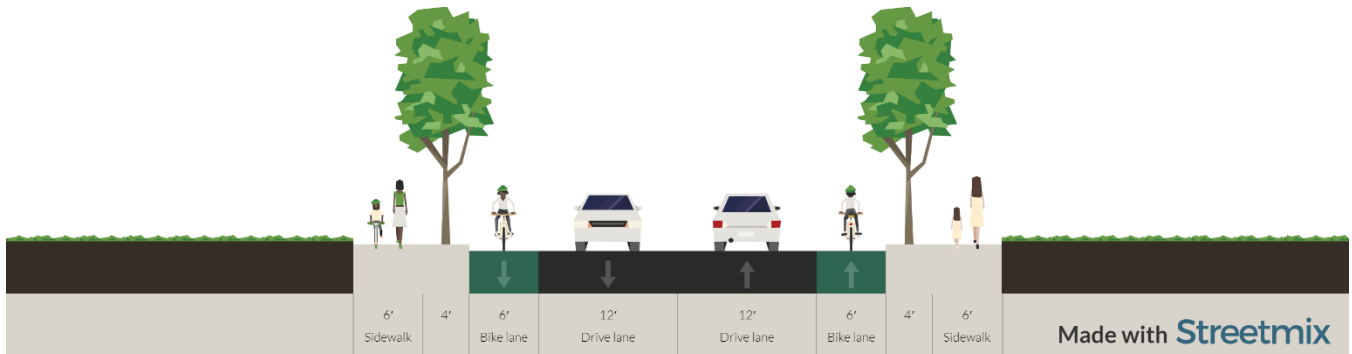
US 101 Downtown Waldport



US 101 South of Downtown Waldport – Seawall

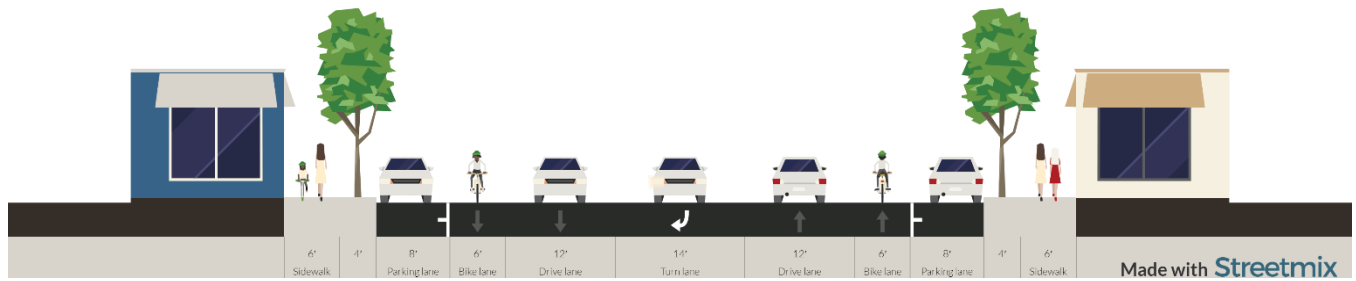


US 101 South of Downtown Waldport – Median/Turn Lane

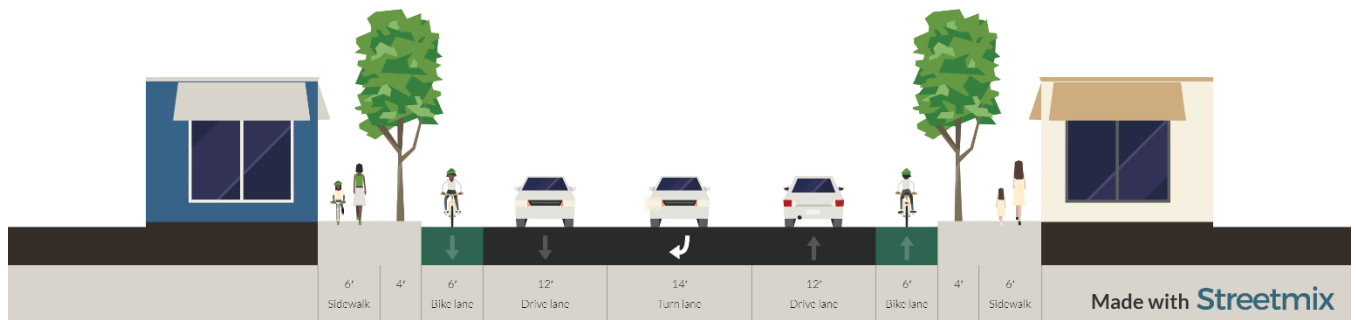


US 101 South of Downtown Waldport

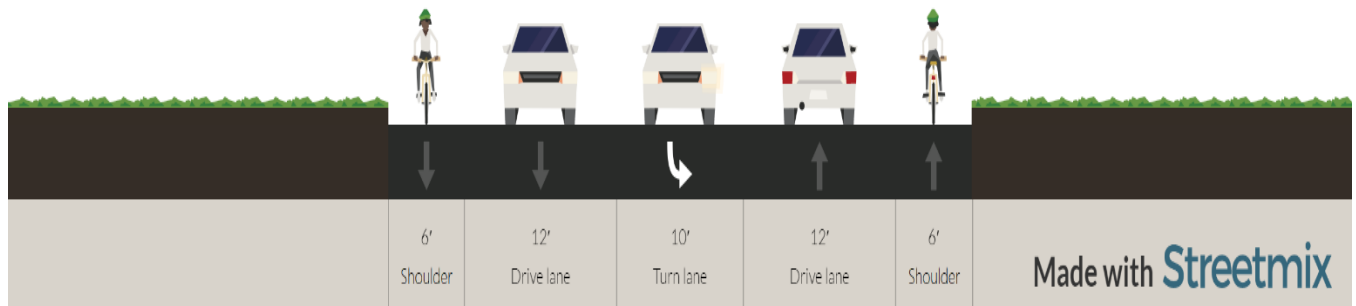
Exhibit 2: Minor Arterial Cross Sections



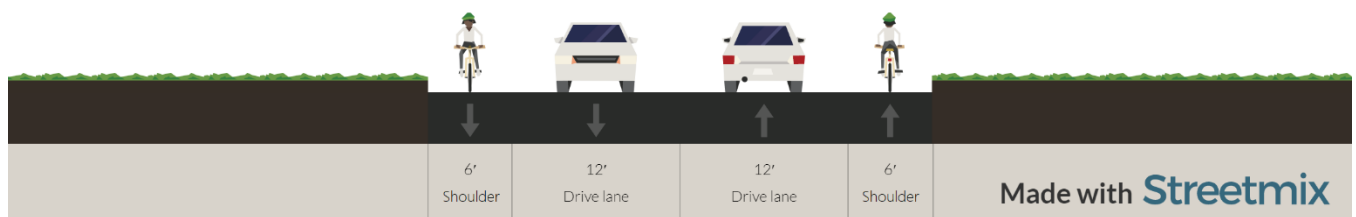
OR 34 Downtown Waldport (US 101 to Cedar Street)



OR 34 Downtown Waldport (Cedar Street to Mill Street)

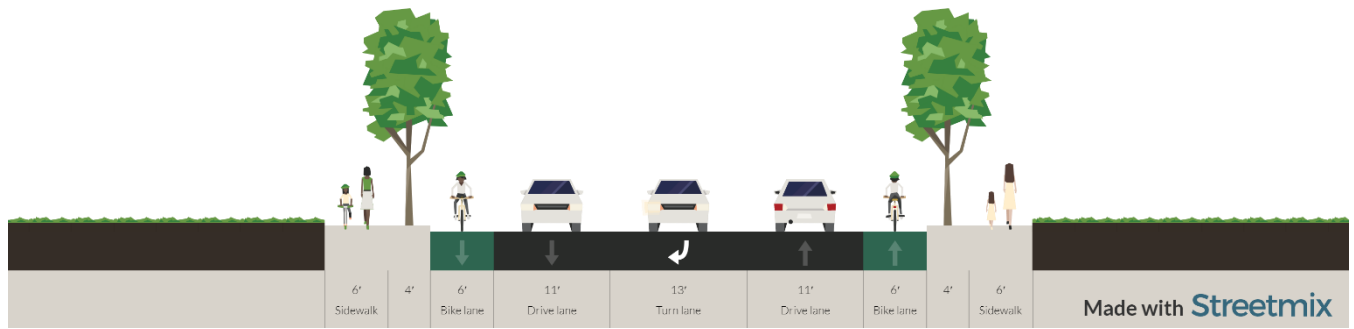


OR 34 East of Downtown Waldport – Median/Turn Lane

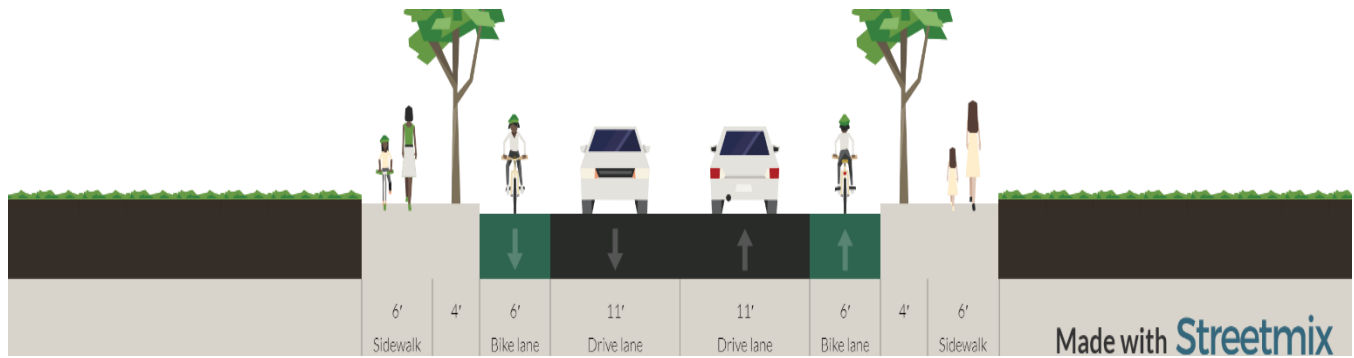


OR 34 East of Downtown Waldport

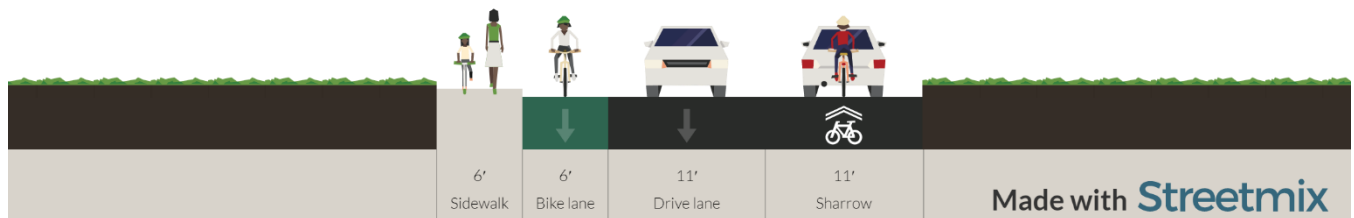
Exhibit 3: Major Collector Cross Sections



Crestline Drive – Medial/Turn Lane

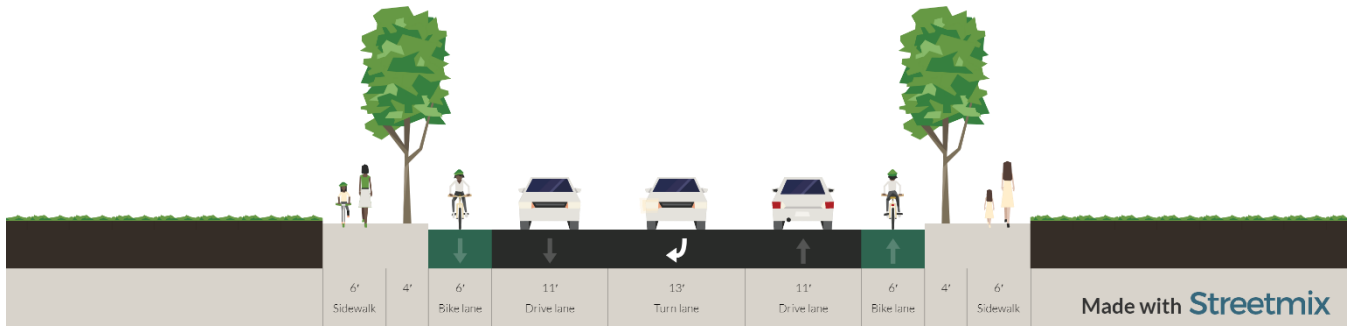


Crestline Drive

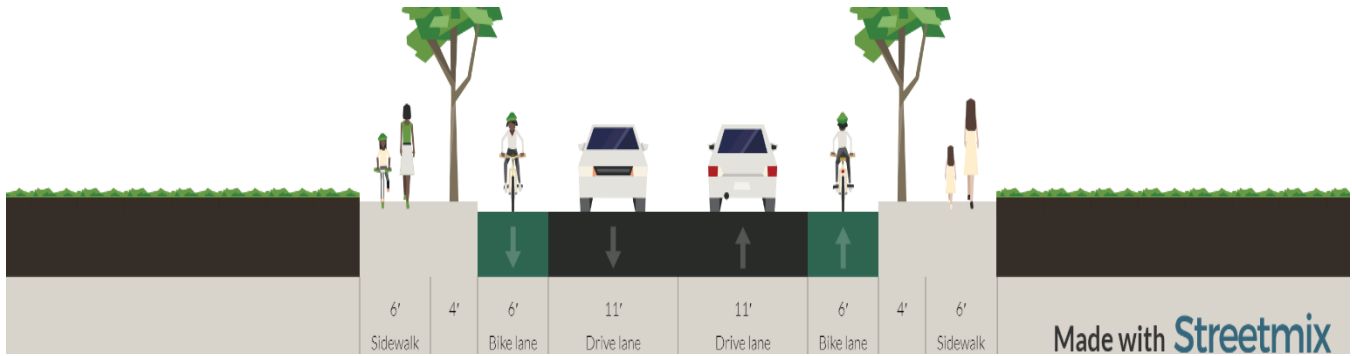


Crestline Drive (Lint Slough Road to Cedar Street)

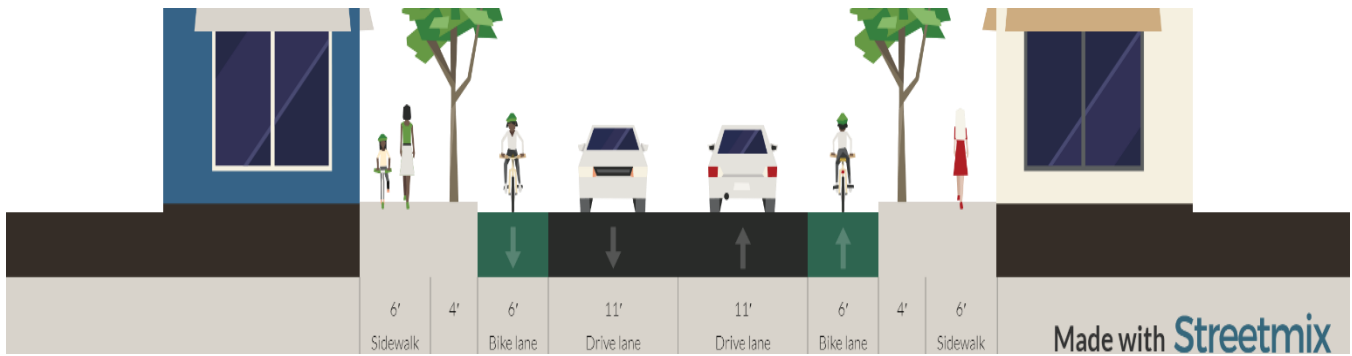
Exhibit 4: Minor Collector Cross Sections



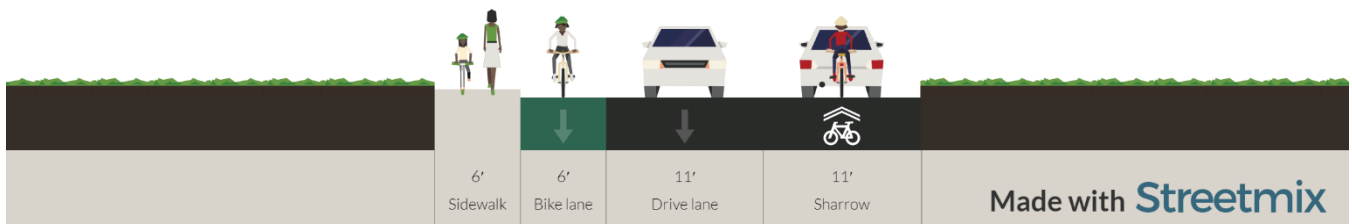
Range Drive/Star Street – Medial/Turn Lane



Range Drive/Star Street

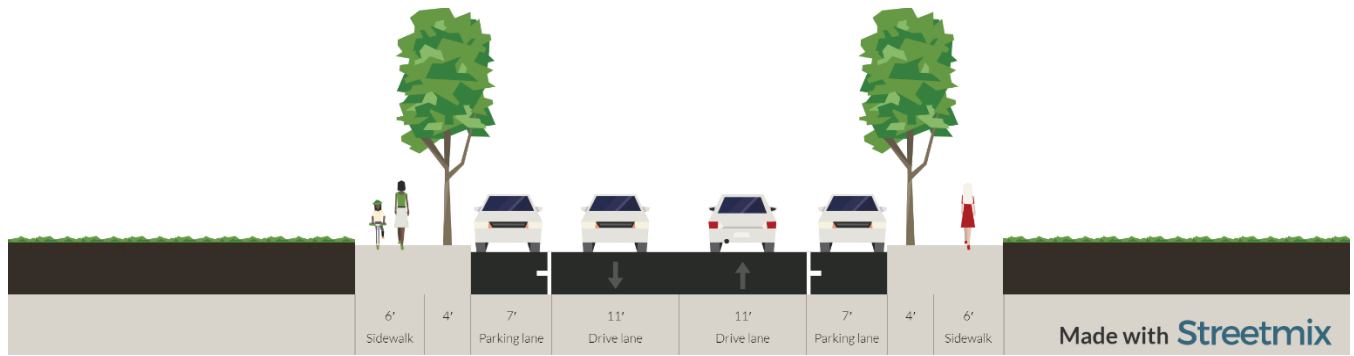


Cedar Street Downtown Waldport

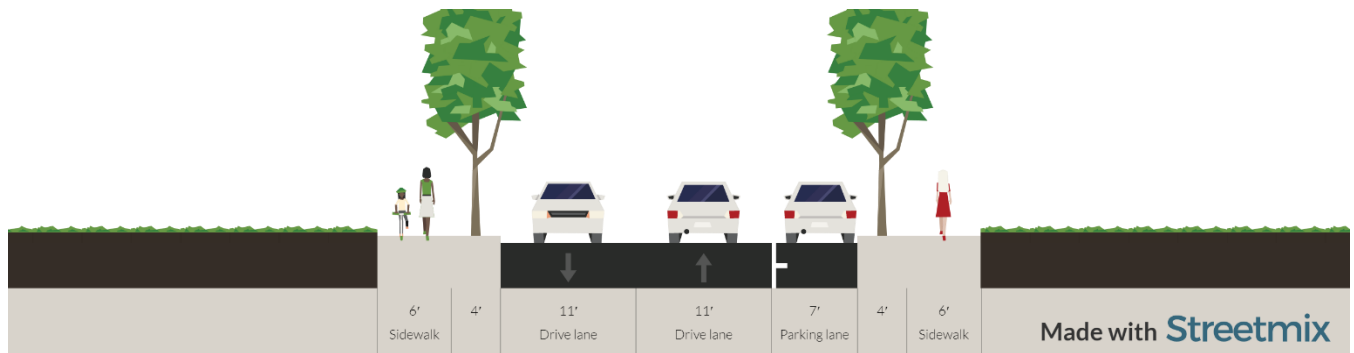


Cedar Street (Star Street to Crestline Drive)

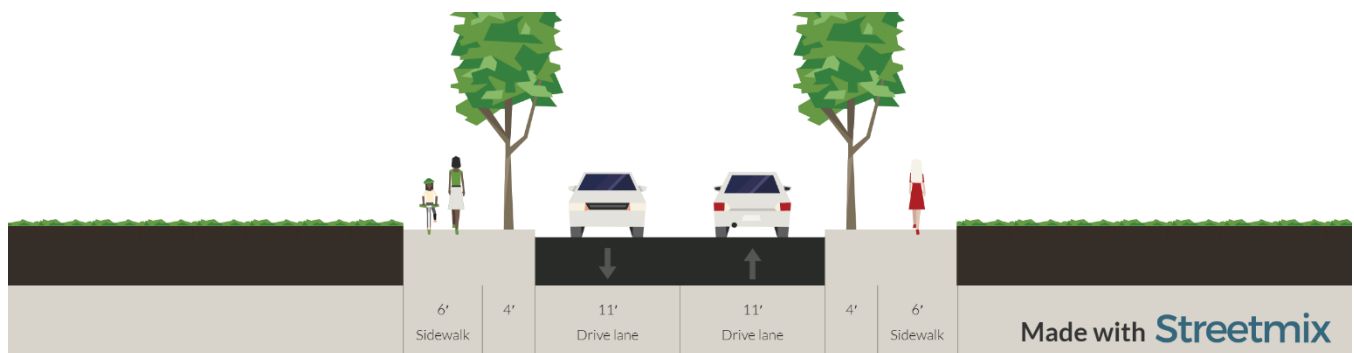
Exhibit 5: Local Street Cross Sections



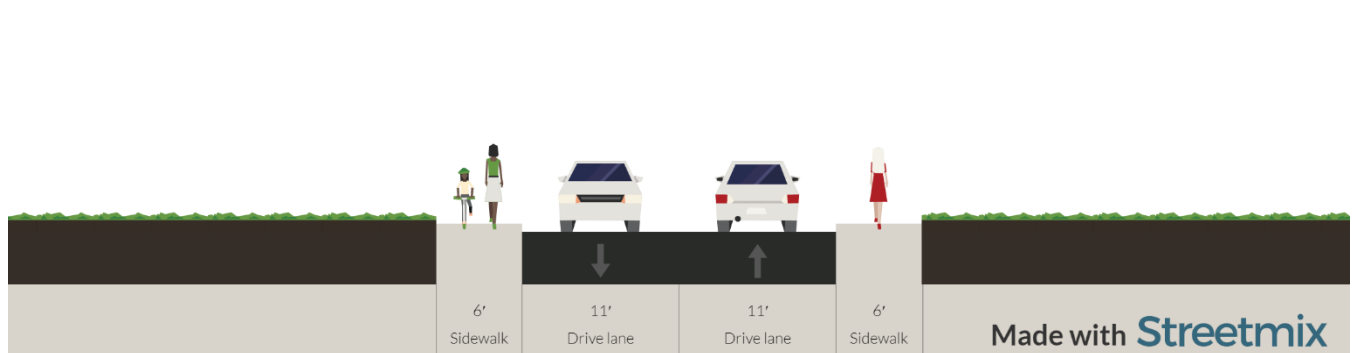
Local Street



Local Street – Parking on One Side



Local Street – No Parking



Local Street - Constrained

STREET CONNECTIVITY

The future street system in Waldport needs to balance the benefits of providing a well-connected grid system with the challenges associated with natural, environmental, and topographical constraints, that may preclude street system connections. Incremental improvements to the street system can be planned carefully to provide route choices for pedestrians, bicyclists, and motorists while accounting for potential neighborhood impacts. In addition, the quality of the transportation system can be improved by making connectivity improvements to the pedestrian and bicycle system separate from street connectivity. Several new street connections were identified throughout the TSP update. Many of these connections will occur as development occurs or as funding becomes available.

LOCAL STREET CONNECTIVITY AND STREET EXTENSION PLAN

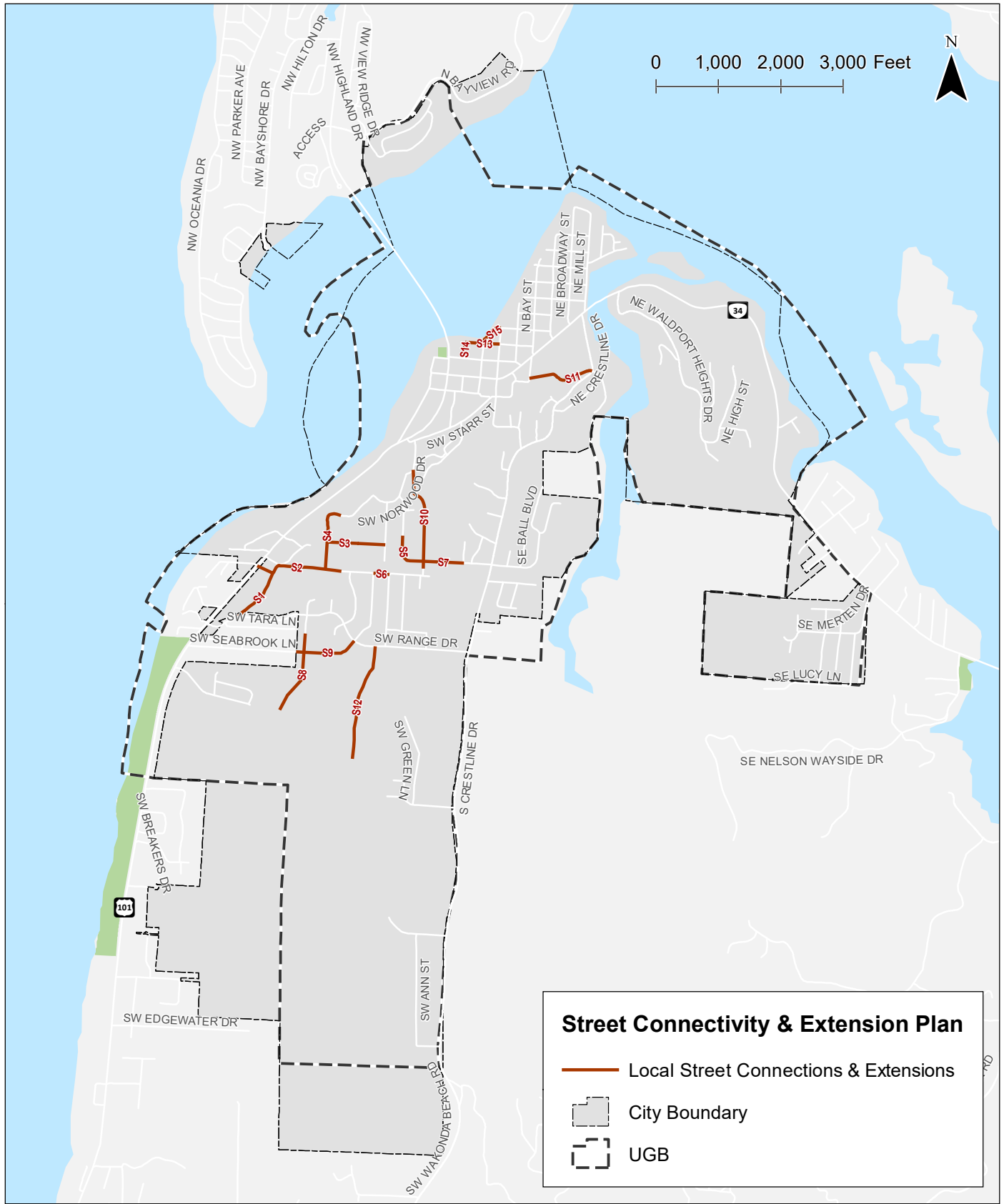
There are several areas within Waldport where existing roadways could be improved, and others where new roadways could be constructed to increase the efficiency of the transportation system as well as improve access and circulation for all travel modes. Table 15 summarizes local street connectivity and street extension projects for the Waldport TSP. Figure 9 illustrates the location and general orientation of the local street connections and street extensions. All local street connections and extensions shown in Figure 9 are conceptual. Several of the projects reflect the Yaquina John Point Land Use and Transportation Plan.

Table 15: Local Street Connectivity and Street Extension Plan Projects

Map ID	Location	Description	Priority	Cost
S1	Alley from Range Drive to New Kelsie-Forestry Way Connection	Provide a 20' alley "backage road" for adjacent property access from Range Drive to new Kelsie Lane-Forestry Way extension	Medium	\$245,000
S2	Kelsie- Lane Forestry Way Extension to US 101	Extend Kelsie Lane from its current wester terminus via Forestry Way to intersect with US 101 directly opposite Corona Court	Medium	\$1,080,000
S3	Norwood Drive to Skyline Terrace Connection	Provide a new local street connection from Norwood Drive Extension (Project S4) to Skyline Terrace	Low	\$650,000
S4	Norwood Drive Extension	Provide a new north-south connection from the south terminus of Norwood Drive to the new Forestry Way-Kelsie Way extension	Low	\$790,000
S5	Dolores Drive Extension to New Wedge Drive to Norwood Connection	Extend Dolores Drive from its current southern terminus south and east to connect to a new north-south street between Norwood Drive and Wedge Drive	Low	\$505,000
S6	Wedge Drive Connection from Fairway to Forest	Connect Wedge Drive from its eastern terminus west of Fairway Drive to Forest Parkway	Low	\$110,000

Map ID	Location	Description	Priority	Cost
S7	Park Drive Extension	Extend Park Drive westward to Wedge Drive to Norwood Drive extension – coordinate with Project S11	Medium	\$470,000
S8	Ocean Terrace Extension	Extend Ocean Terrace southward to vacant undeveloped land to south	Low	\$720,000
S9	Seabrook Lane Extension to Range Drive	Extend Seabrook Lane eastward to connect with Range Drive opposite Fairway Drive	Low	\$720,000
S10	Wedge Drive to Norwood Connection	Provide connection from Wedge Drive to Norwood Drive	Low	\$1,115,000
S11	New Local Street Connection 1	Provide a new local street connection from Bay Street to Crestline Drive	Low	\$755,000
S12	New Local Street Connection 2	Provide a new local street connection from Access Road #3 (Project A5) north to Range Drive	Low	\$1,330,000
S13	Spruce Street Extension	Extend Spruce Street west to NW Verbena Street	Low	\$395,000
S14	Verbena Street Extension	Extend NW Verbena Street north to Spruce Street	Low	\$70,000
S15	Huckleberry Street Extension	Extend Huckleberry Street west to NW John Street	Low	\$180,000
S16	NW John Street Extension	Extend NW John Street north to Huckleberry Street	Low	\$180,000
			Total Low Priority Project Costs	\$7,520,000
			Total Medium Priority Project Costs	\$1,795,000
			Total High Priority Project Costs	\$0
			Total Local Street Connectivity and Street Extension Plan Project Costs	\$9,315,000

In addition to the local street connections and street extensions described above, there are several parking lots within the downtown area that serve a similar function to local streets, such as the parking area located along Willow Street between John Street and Cedar Street. As redevelopment occurs, these parking areas could be converted to local streets to improve local street connectivity.



**Local Street Connectivity and Street Extension Plan
Waldport, Oregon**

**Figure
9**

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ARTERIAL AND COLLECTOR STREET CONNECTIVITY PLAN

In addition to the local street connections and extensions described above, several major street connections were identified for the Waldport TSP update. Table 16 identifies the street connectivity projects for the Waldport TSP update. The priorities shown in Table 16 are based on the project evaluation criteria and were updated based on input from the project team, advisory committee, and the general public. The cost estimates are based on average unit costs for similar roadway improvements and on the Industrial Park Master Plan cost estimates. The cost estimates do not include right-of-way.

Table 16: Street Connectivity Projects

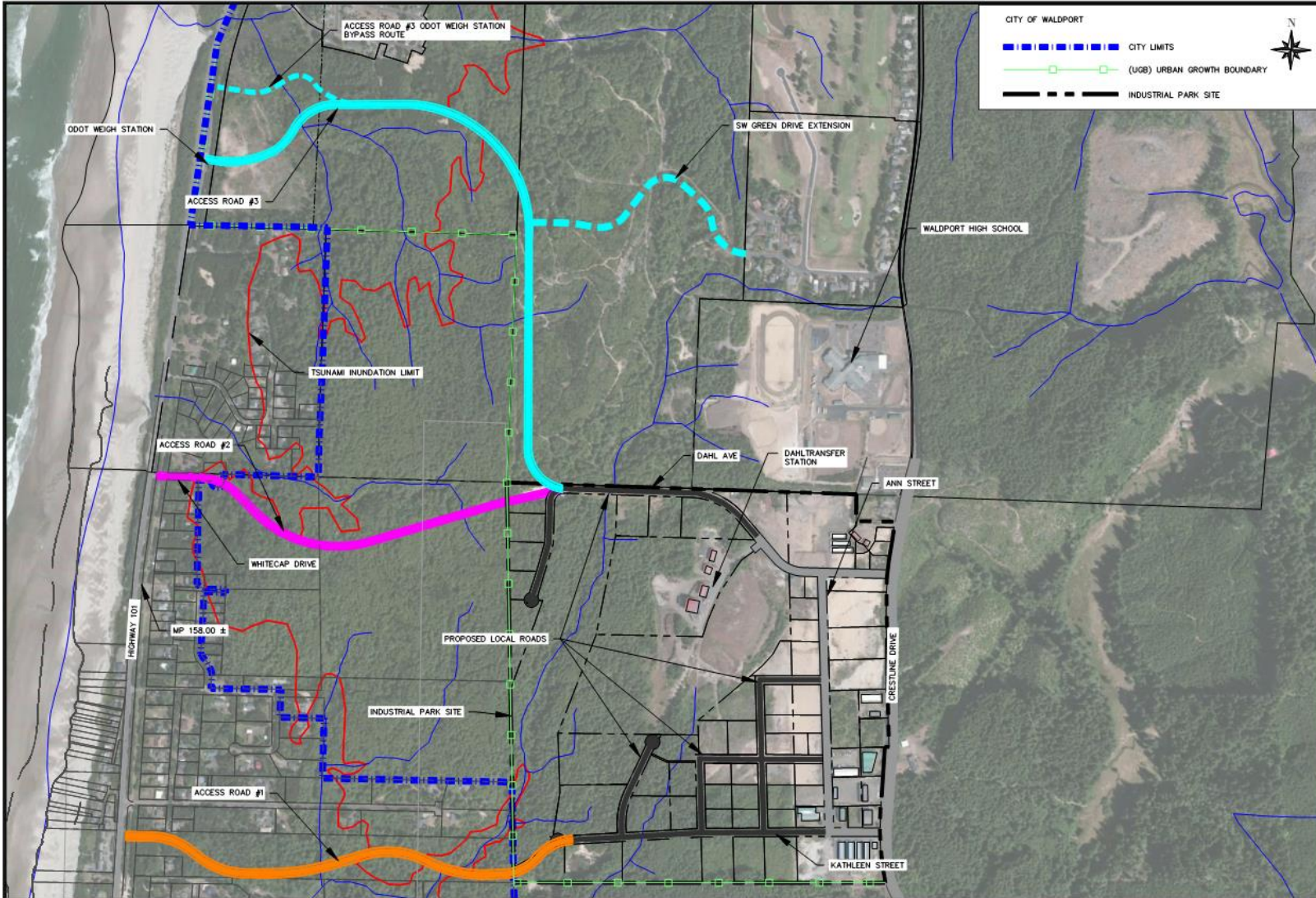
Map ID	Location	Project	Priority	Cost
A1 ¹	Crestline Drive	Convert Crestline Drive to a one-way, southbound (lowland to upland) roadway with pedestrian and bicycle access in both directions	High	\$25,000
A2	Crestline Drive	Widen and convert Crestline Drive to a two-way facility with pedestrian and bicycle access in both directions	Medium	\$1,905,000
A3	Access Road #1	Connect US 101 near SW Sitka Ridge Court and to the Industrial Park at an extension of SW Kathleen Street (See exhibit 7 below)	Low	\$5,220,000
A4	Access Road #2	Connect US 101 at SW Whitecap Drive and to the Industrial Park at an extension of SW Dahl Avenue (See exhibit 7 below)	Medium	\$4,535,000
A5	Access Road #3	Connect US 101 at the weigh station and to the Industrial Park at an extension of SW Dahl Avenue (See exhibit 7 below)	Low	\$8,440,000
Total Low Priority Project Costs				\$13,660,000
Total Medium Priority Project Costs				\$6,440,000
Total High Priority Project Costs				\$25,000
Total Street Connectivity Plan Project Costs				\$20,125,000

1. This project is only needed to address potential slide activity prior to redevelopment of the roadway.

STREET CAPACITY

Street capacity was evaluated to consider automobile, pedestrian, bicycle, and transit needs. Table 17 identifies the street capacity projects for the Waldport TSP update. The priorities shown in Table 17 are based on the project evaluation criteria and were updated based on input from the project team, advisory committee, and the general public. The cost estimates are based on average unit costs for similar roadway improvements. The cost estimates do not include right-of-way, though right-of-way impacts are anticipated to be minimal. Figure 10 illustrates the schematic of project A6, which includes considerations of pedestrian, bicycle, and transit projects identified in the pedestrian and bicycle sections.

Exhibit 7: Industrial Area Access Road Alternatives



- Access Road #3
- Access Road #2
- Access Road #1



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SCHEMATIC LAYOUT ONLY. NOT ALL DRIVEWAYS, STREETS, FACILITIES, OR CROSSINGS ARE SHOWN.

US 101 & OR 34 Conceptual Design
Waldport, OR

Figure
10

Table 17: Street Capacity Projects

Map ID	Location	Project	Priority	Cost
A6	US 101	Reconfigure US 101 from the Alsea Bridge to Maple Street with a three-lane section	High	\$10,000 ¹
A7	US 101/ Range Drive	Reduce the curb radius at the northeast and southwest corners of the intersection	Low	\$5,000 ¹
A8	US 101	Install a continuous two-way left turn lane along US 101 from the seawall to Patterson Memorial State Park Entrance-Ocean Hills Drive	Low	\$145,000 ¹
A9	US 101/State Park Entrance	Realign Patterson State Park Entrance with Ocean Hills Drive	Low	\$25,000 ¹
A10	Broadway Street	Install an 8-foot shoulder/parking lane on the east side of the roadway north of Spencer Street to provide staging for trucks with trailers waiting to access the boat launch	Medium	\$175,000
Total Low Priority Project Costs				\$175,000
Total Medium Priority Project Costs				\$175,000
Total High Priority Project Costs				\$10,000
Total Street Capacity Costs				\$360,000

1. The cost reflects the City’s likely contribution (10%) to the overall project cost.

TRAFFIC SAFETY PLAN

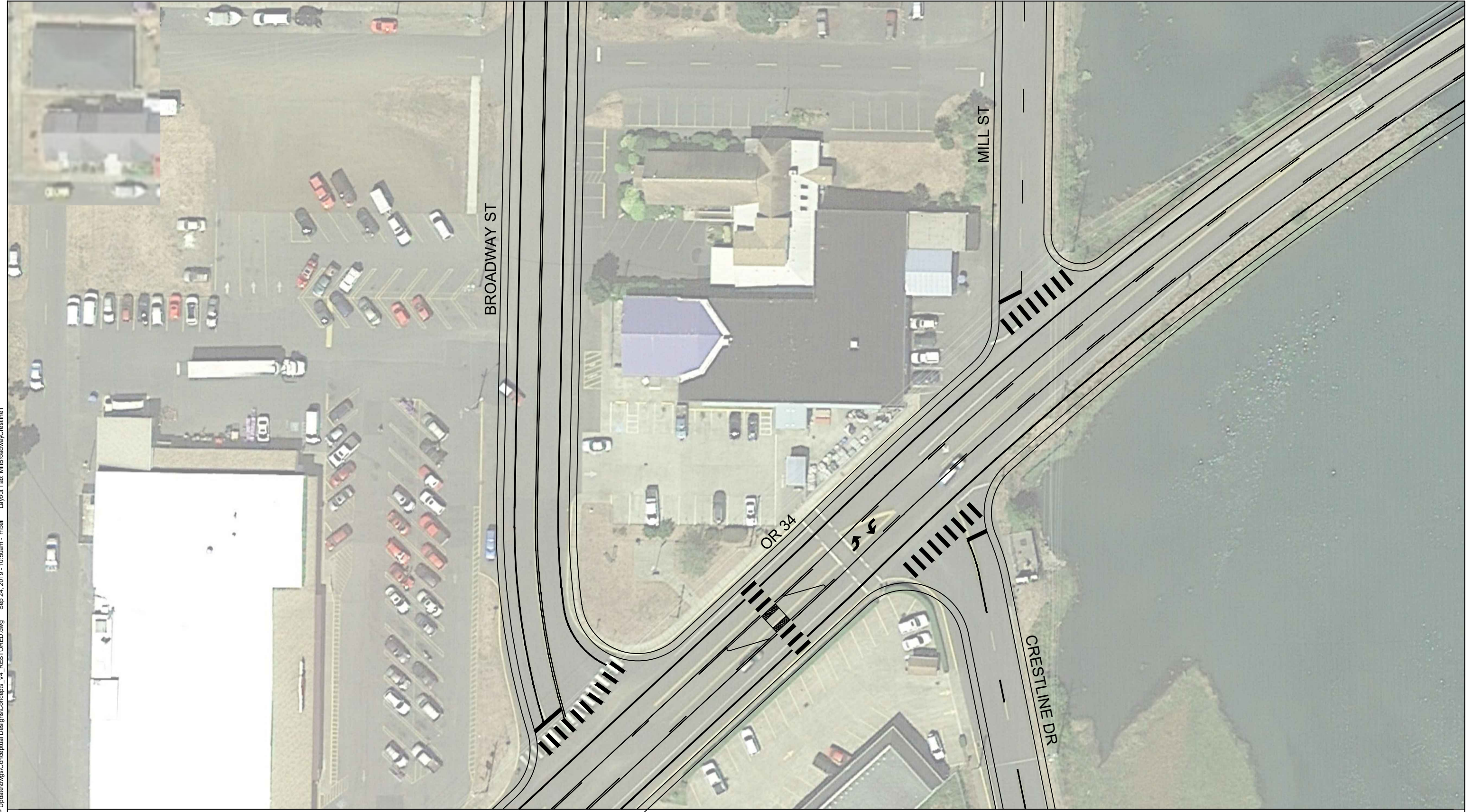
Traffic safety has a significant impact on how people use the transportation system, particularly in areas where real or perceived safety risks prevent people from using more active travel modes, such as walking, biking, and taking transit. Several of the traffic safety projects identified in *Tech Memo 5: Alternatives Analysis* for US 101 and OR 34 are addressed under the roadway, bicycle, and pedestrian plans described above. These alternatives include the roadway reconfiguration and crosswalk enhancements along US 101 and the bicycle lane/shoulder and crosswalk enhancements along OR 34. Table 18 summarizes the preferred traffic safety alternatives that are not addressed under other plans. Figure 11 illustrates the traffic safety plan projects.

The traffic safety plan also includes intersection alternatives for the Mill/Crestline/Broadway area of OR 34. Figure 12 through Figure 15 show the alternatives in this area, which include modifications to turn lanes along OR 34 and realignments of Mill Street or Crestline Drive. The preferred alternatives include Alternative 1 – Two-Way Left-Turn Lane in the short-term and Alternative 5 – Crestline Realigned to Broadway in the long-term.

Figure 11: Traffic Safety Plan Projects

Table 18: Traffic Safety Plan Projects

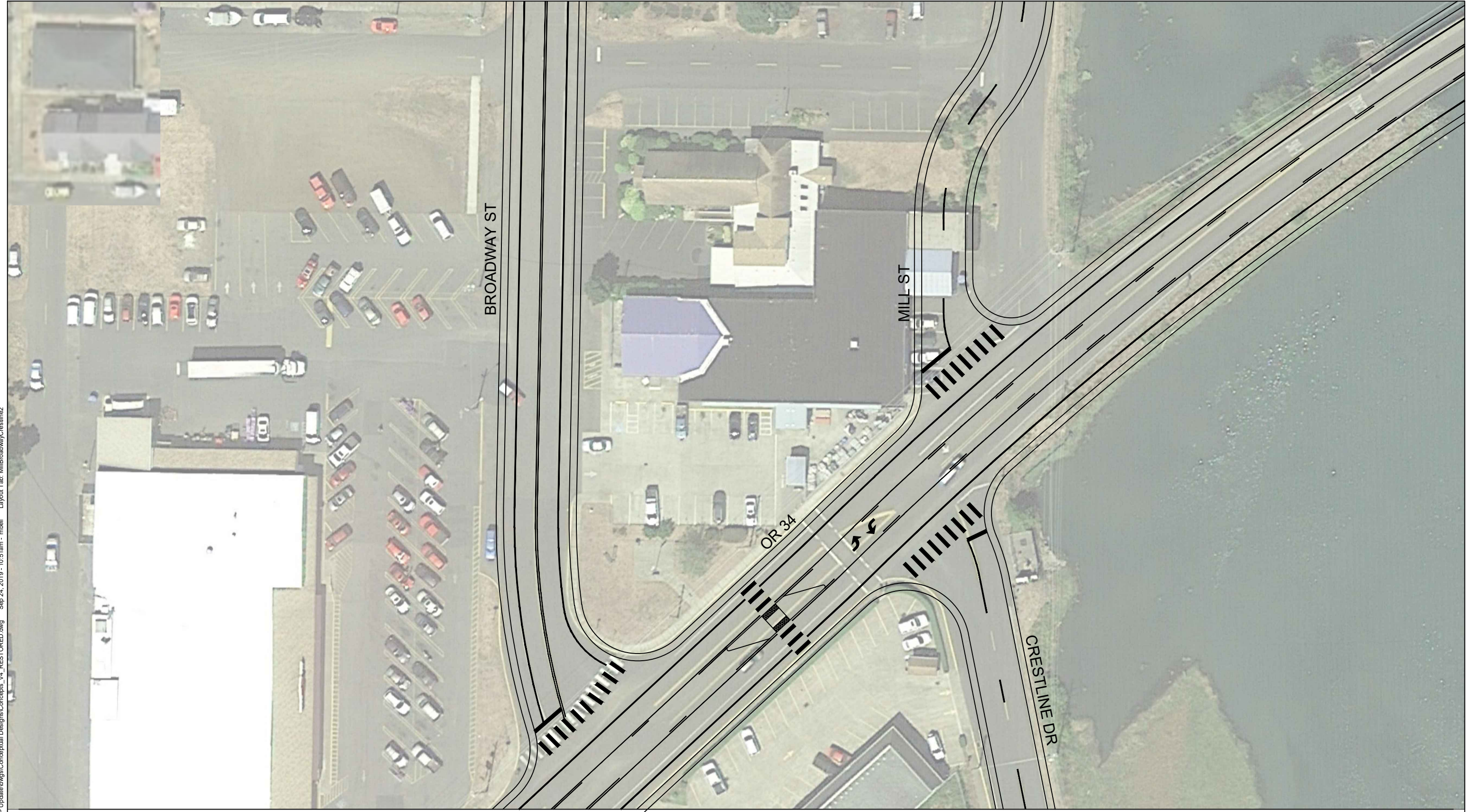
Map ID	Location	Description	Priority	Cost
S1	OR 34/ Mill Street	Reconfigure the median striping to provide a continuous two-way left-turn lane along OR 34 through the intersections	High	\$50,000
S2	OR 34/ Mill Street	Realign Crestline Drive to align with Broadway Street	Low	\$420,000
S3	Range Drive	Install enhanced curve warning signs and chevrons along range Drive from US 101 to SW Forest Parkway	High	\$50,000
S4	OR 34	Install enhanced curve warning signs and chevrons along OR 34 and install shoulder rumble strips along both sides of the roadway from the east side of the Lint Slough bridge to SE Gibson Road	High	\$50,000
			Total Low Priority Project Costs	\$420,000
			Total Medium Priority Project Costs	\$0
			Total High Priority Project Costs	\$150,000
			Total Safety Plan Project Costs	\$570,000



Mill/Crestline/Broadway Alternative 1 - Two-Way Left-Turn Lane
Waldport, OR

Figure
12

SCHEMATIC LAYOUT ONLY. NOT ALL DRIVEWAYS, STREETS, FACILITIES, OR CROSSINGS ARE SHOWN.

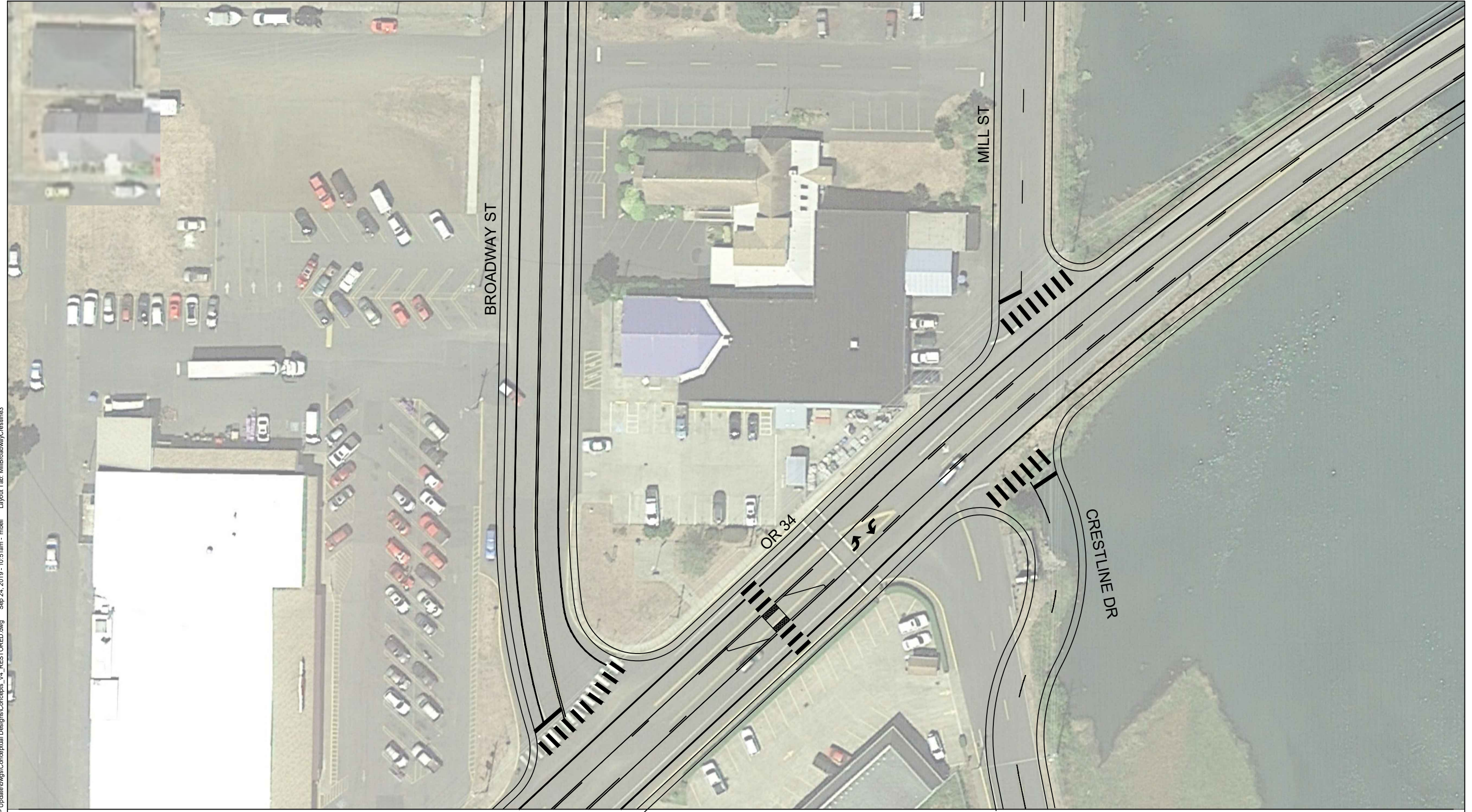


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SCHEMATIC LAYOUT ONLY. NOT ALL DRIVEWAYS, STREETS, FACILITIES, OR CROSSINGS ARE SHOWN.

Mill/Crestline/Broadway Alternative 2 - Realigned Mill
Waldport, OR

Figure
13

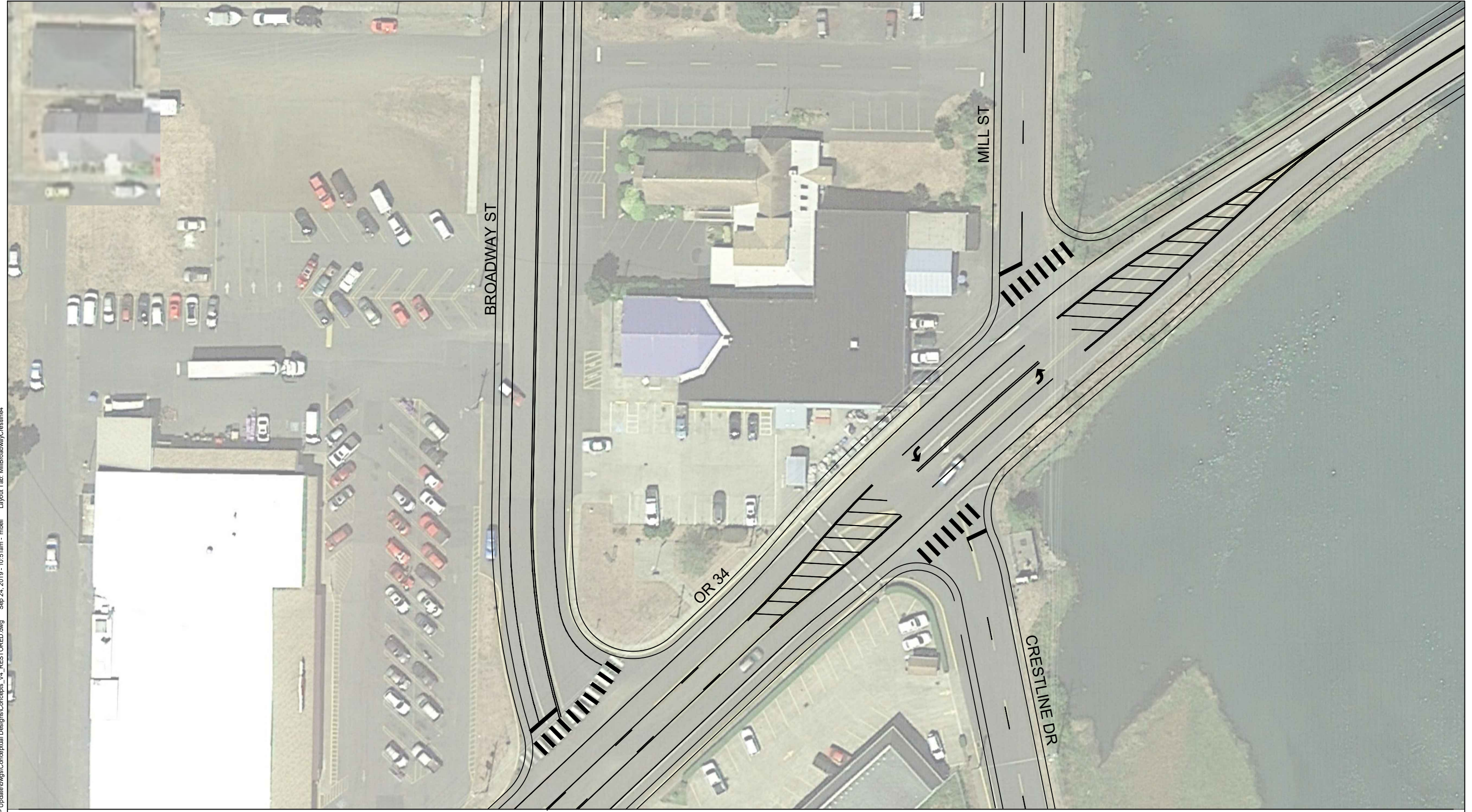


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SCHEMATIC LAYOUT ONLY. NOT ALL DRIVEWAYS, STREETS, FACILITIES, OR CROSSINGS ARE SHOWN.

Mill/Crestline/Broadway Alternative 3 - Realign Crestline
Waldport, OR

Figure
14

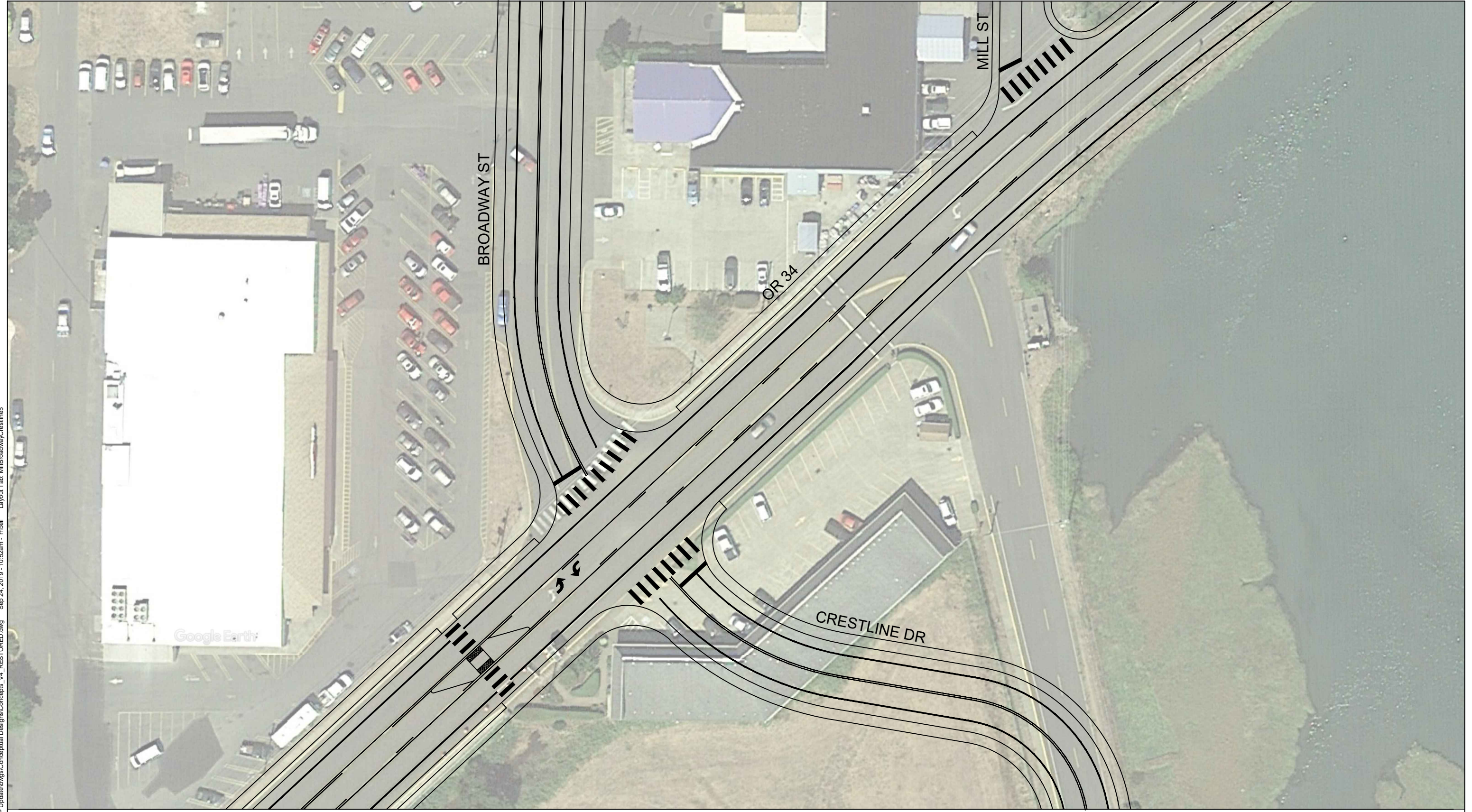


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SCHEMATIC LAYOUT ONLY. NOT ALL DRIVEWAYS, STREETS, FACILITIES, OR CROSSINGS ARE SHOWN.

Mill/Crestline/Broadway Alternative 4 - Side-by-Side Lefts
Waldport, OR

Figure
15



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Mill/Crestline/Broadway Alternative 5 - Crestline Aligned to Broadway
Waldport, OR

Figure
16

SCHEMATIC LAYOUT ONLY. NOT ALL DRIVEWAYS, STREETS, FACILITIES, OR CROSSINGS ARE SHOWN.

OTHER TRAVEL MODES

AIR

There are no airports located in Waldport. The closest airport is located approximately three miles southwest of Waldport in Lincoln County. The Wakonda Beach Airport is a general aviation airport, it is owned by the Oregon Department of Aviation and is open to the general public. The airport has one unpaved 3,000 x 30-foot runway and services an average of 69 aircrafts per month.

While there are no air transportation projects included in the Waldport TSP, the City will continue to support and promote improvements to the local and regional transportation system to ensure adequate access for Waldport residents to the Wakonda Beach Airport, the Portland International Airport, and other public and private airports in the area.

RAIL

There are no passenger or freight rail terminals in Waldport. The closest passenger rail terminal is located approximately 75 miles east of Waldport in Albany and is served by Amtrak. Amtrak's Coastal Starlight route provides service between Seattle, Washington and Los Angeles, California Albany Oregon City (ORC) and downtown Portland (PDX) seven days a week. The closest freight rail terminal is located in Toledo and is served by Portland and Western Railroad (PNWR).

While there are no rail transportation projects included in the Waldport TSP update, the City will continue to support and promote improvements to the local and regional transportation system to ensure adequate access for Waldport residents to passenger and freight rail services.

WATER

Water-borne transportation planning is applicable to the Alsea River and Bay, and the Pacific Ocean. The Port of Alsea provides a major facility for boaters and will continue to be the primary facility for water transportation. Alsea Bay and the Port of Alsea are primarily used for commercial and recreational fishing, and not as a facility for transport of freight or destination of ocean-going vessels.

All recreation

PIPELINE

Comes from east of Waldport

Central Lincoln PUD

Natural Gas

Scott, with public work to confirm

TSUNAMI EVACUATION PLAN

As indicated in *Tech Memo 5: Alternatives Analysis and Funding Program*, evaluation of tsunami evacuation routes conducted by the Oregon Department of Geology and Mineral Industries as part of their Beat the Way initiative, indicates that most of the Yaquina John Point area, downtown Waldport, and the east side of town are located within a slow walk (0-1.4 mph) or walk (1.4-2.7 mph) distance of a safety destination. Projects that provide improved or increased tsunami evacuation routes include two trail connections identified in the multi-use path and trails plan and several roadway improvements identified in the roadway plan.

- ▶ Trail connections include:
 - MU1: A multi-use path or trail connecting OR 34 to Crestline Drive through the open space site (former high school property). This potential trail connection could also provide redundancy to Crestline Drive should it fail during an earthquake.
 - MU22: A multi-use path or trail connecting Clover Lane to Merten Drive.
- ▶ Crestline Drive serves as a critical connection for emergency access and tsunami evacuation. Maintaining the roadway as a two-way connection or as a one-way southbound (lowland to upland) connection would benefit tsunami evacuation.
- ▶ Range Drive also serves as a critical connection for emergency access and tsunami evacuation. Improvements along Range Drive, including the elimination or mitigation of curves and provision of pedestrian and bicycle facilities on both sides of the street would promote faster emergency response times and tsunami evacuation.
- ▶ A new east-west road to the industrial park in South Waldport, connecting US 101 and Crestline Drive would provide an additional evacuation route.

FUNDING AND IMPLEMENTATION

The TSP includes planned and financially constrained transportation improvement projects. The planned projects consist of all projects identified throughout the TSP planning process needed to address gaps and deficiencies within the City while the financially constrained projects consist of the projects the City anticipates being able to fund over the next 21 years (2019 through 2040). Based on a review of existing and potential future revenue sources, the amount of revenue expected to be available for capital projects in the TSP is approximately **\$1.2 million** over the next 21 years.¹

TRANSPORTATION SYSTEM PLAN COST SUMMARY

Table 19 summarizes the costs associated with the planned and financially constrained transportation improvement projects. As shown, the full cost of the planned projects is approximately **\$45 million** over the 21-year period, including **<\$1 million** in high priority projects, **\$17 million** in medium priority projects, and **\$28 million** in low priority projects. Based on the anticipated revenue, there will be approximately **1.2 million** to fund the financially constrained projects. This suggests **the city will have sufficient revenue to fund transportation improvements in the financially constrained plan.**

Table 19: Transportation System Plan Cost Summary

Project Type	High Priority (Financially Constrained Plan)	Medium Priority	Low Priority	Total
Roadway	\$35,000	\$6,615,000	\$13,835,000	\$20,485,000
Bicycle	\$125,000	\$4,335,000	\$3,565,000	\$8,025,000
Pedestrian	\$150,000	\$3,190,000	\$1,810,000	\$5,150,000
Multi-use Path and Trails	\$255,000	\$1,150,000	\$565,000	\$1,970,000
Transit	\$0	\$40,000	\$0	\$40,000
Safety	\$150,000	\$0	\$420,000	\$570,000
Parking	\$30,000	\$0	\$0	\$30,000
Local Street Connectivity	\$0	\$1,795,000	\$7,520,000	\$9,315,000
Total	\$745,000	\$17,125,000	\$27,715,000	\$45,585,000

Given the limited available funding, the City will likely need to identify other potential revenue sources to fund transportation. A summary of these potential revenue sources is provided below.

¹ This does not account for potential funding from State sources, such as the Statewide Transportation Improvement Program (STIP). While it is likely that the STIP will be used to fund some transportation improvements within the city over the next 21 years, there is some uncertainty in acquiring these funds. Therefore, they are not accounted for in the City's revenue forecast.

FUNDING PROGRAMS

Transportation revenue in Waldport primarily consists of state revenue from the state gas tax, which was recently changed by House Bill (HB) 2017, and local revenue from Road District property taxes. Waldport does not have a transportation system development charge (SDC). The following summarizes current and potential future funding sources for transportation improvements.

CURRENT TRANSPORTATION FUNDING SOURCES

State Revenue

The primary state revenue source is the 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.

Local Revenue

The primary local revenue source is from Road District property taxes. Road districting is a technique used to localize road construction or maintenance to a portion of a county and to place financial responsibility within the localized area.

POTENTIAL TRANSPORTATION FUNDING SOURCES

Based on the current transportation funding sources identified above, Waldport will likely need to identify additional funding sources that can be dedicated to transportation-related capital improvement projects over the next 22 years. 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. A list of potential grant sources and partnering opportunities for the City are identified below.

Federal Sources

Fixing America's Surface Transportation (FAST) Act

Fixing America's Surface Transportation (FAST) Act funds surface transportation programs, including, but not limited to, federal-aid highways. The FAST Act is the first long-term surface transportation authorization enacted in a decade that provides long-term funding certainty for surface transportation. Non-motorized transportation, as a mode of surface transportation, are eligible for funding through the FAST Act. The FAST Act improves mobility on highways by establishing and funding new programs to support critical transportation projects to ease congestion and facilitate the movement of freight on the interstate system and other major roads. The FAST Act authorizes \$226.3 billion in federal funding for FY 2016 through 2020 for road, bridge, bicycling, and walking improvements.

More information is available at: <https://www.fhwa.dot.gov/fastact/summary.cfm>

Surface Transportation Block Grant (STBG)

In 2015, the FAST Act amended the Surface Transportation Program (STP) and changed the program name to the Surface Transportation Block Grant Program (STBG). STBG funds are flexible funding sources for jurisdictions and are eligible to be used for non-motorized transportation projects. STBG funds are contract authority. STBG funds are

available for obligation for a period of three years after the last day of the fiscal year for which the funds are authorized. Therefore, funds are available for obligation for up to four years. The federal share is generally 80 percent and 90 percent for projects on the Interstate System unless the project adds lanes that are not high-occupancy-vehicle or auxiliary lanes. For projects that add single occupancy vehicle capacity, that portion of the project will revert to 80 percent. Safety improvements may have a Federal share of 100 percent.

More information is available at: <https://www.fhwa.dot.gov/fastact/factsheets/stbqfs.cfm>

Congestion Mitigation and Air Quality (CMAQ)

The Congestion Mitigation and Air Quality (CMAQ) program provides funding for projects located within the containment area, or urban growth boundary, of an incorporated city that help reduce emissions and meet national air quality standards, such as transportation demand management programs, bicycle and pedestrian improvements, transit projects, diesel retrofits, and vehicle emissions reductions programs. All types of non-motorized transportation projects are eligible for CMAQ funding. States are required to provide a non-federal match for program funds (which has not been the case historically for Federal lands highway funding). Estimated CMAQ funding for FY 2018-19 will be \$2.4 billion and will stretch to nearly \$2.5 billion by FY 2020-21.

More information is available at: <https://www.fhwa.dot.gov/fastact/factsheets/cmaqfs.cfm>

Highway Safety Improvement Program (HSIP)

The Highway Safety Improvement Program (HSIP) is a core federal-aid program with the purpose of achieving a significant reduction in traffic fatalities and serious injuries on all public roads, including non-state-owned public roads and roads on tribal lands. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads that focuses on performance. Highway safety improvement projects can be either infrastructure or non-infrastructure projects. ODOT administers HSIP funding through the All Roads Transportation Safety (ARTS) program described below. The HSIP program requires a local match for projects where HSIP funding will be used. For Oregon, this local match is 7.78 percent of the project cost.

More information on the HSIP Program is available at: <https://www.fhwa.dot.gov/fastact/factsheets/hsipfs.cfm>

State Sources

All Roads Transportation Safety (ARTS)

The All Roads Transportation Safety (ARTS) program (formerly known as Jurisdictionally Blind Safety Program) is intended to address safety needs on all public roads in Oregon. By working collaboratively with local jurisdictions, ODOT expects to increase awareness of safety on all roads, promote best practices for infrastructure safety, compliment behavioral safety efforts and focus limited resources to reduce fatal and serious injury crashes in the state of Oregon. The program is data driven to achieve the greatest benefits in crash reduction and should be blind to jurisdiction. The ARTS program primarily uses federal funds from the HSIP with a required local match of 7.78 percent of the project cost.

More information is available at: <https://www.oregon.gov/ODOT/Engineering/Pages/ARTS.aspx>

Connect Oregon

Connect Oregon invests in air, rail, marine, bicycle, and pedestrian infrastructure across the state to ensure that Oregon's transportation system is strong across all modes of transport. Connect Oregon funding cannot go to projects that are eligible for funding through the state highway fund or related funding sources. Projects that are

submitted for Connect Oregon grant funding are eligible to receive up to 70 percent of the project costs. Seven percent of funding for Connect Oregon Parts One and Two are dedicated to non-motorized transportation projects. With the passage of HB 2017, several important changes have been made to the Connect Oregon program:

- ▶ Public transit projects can no longer be funded through Connect Oregon
- ▶ New funding sources include a vehicle dealer privilege fee and a \$15 bicycle excise tax. Funds from the bicycle excise tax can only be used on bicycle or pedestrian projects.
- ▶ The Oregon Transportation Commission has directed \$60 million in Connect Oregon funding to be distributed to four specific projects for the 2017-2019 biennium. After the four projects have been funded, and if funding is available, a competitive grant process may occur in the 2019-2021 or 2021-2023 biennia.

More information is available at: <https://www.oregon.gov/ODOT/Programs/Pages/ConnectOregon.aspx>

Statewide Transportation Improvement Program

The Statewide Transportation Improvement Program (STIP) is ODOT's four-year transportation capital improvement program. It is the document that identifies the funding for, and scheduling of, transportation projects and programs. It includes projects on the federal, state, city, and county transportation systems, multimodal projects (highway, passenger rail, freight, public transit, bicycle and pedestrian), and projects in the National Parks, National Forests, and Indian tribal lands. STIP project lists are developed through the coordinated efforts of ODOT, federal and local governments, Area Commissions on Transportation, tribal governments, and the public.

The STIP is divided into two broad categories: Fix-It and Enhance. The Enhance category funds activities that enhance, expand, or improve the transportation system. The project selection process for the Enhance category has undergone significant changes in the last few years and reflects ODOT's goal to become a more multimodal agency and make investment decisions based on the system as a whole, instead of for each mode or project type separately. The agency has requested assistance from its local partners in developing Enhance projects that assist in moving people and goods through the transportation system. The projects are selected through a competitive application process. The Fix-it category funds activities that fix or preserve the transportation system. These projects are developed mainly from ODOT management systems that help identify needs based on technical information for things like pavement and bridges. Non-Highway programs, a separate part of the STIP, funds non-motorized transportation projects, and Area Commissions on Transportation will help recommend these projects to ODOT.

More information is available at: <https://www.oregon.gov/ODOT/STIP/Pages/About.aspx>

Safe Routes to School

ODOT's Safe Routes to School (SRTS) programs are focused on providing grants to make it safer for children to walk and bike to school, providing opportunity through investments in infrastructure and non-infrastructure. ODOT's grant funding for infrastructure programs help create and improve safe walking and biking routes to school, while its grant funding for non-infrastructure programs help raise awareness by focusing on education and outreach. Non-motorized transportation projects related to getting children to school safely, such as closing gaps in the sidewalk and bicycle networks, are eligible for infrastructure program funding. HB 2017 reestablished dedicated funding to SRTS programs. The current funding cycle is focused on projects that address a safety risk factor, include a 20 percent cash match, and are within one mile of a Title I school.

More information is available at: <https://www.oregon.gov/ODOT/Programs/Pages/SRTS.aspx>

House Bill (HB) 2017 Transportation Investments

In August 2017, Governor Kate Brown signed an eight-year transportation tax increase to raise roughly \$5 billion for roads, bridges, mass transit, electric vehicles, and other transit options. House Bill (HB) 2017 affects drivers, bicyclists and payroll employees by increasing the gas tax, weight-mile tax, and other transportation-related fees such as excise tax on the sale of bicycles, new vehicles, and instituting a statewide payroll tax for transit equivalent to 1/10th of 1 percent of wages, deducted by employer from payment to employee. Though this funding source is one that can be used to finance multitude of project types, some cities have indicated that additional funds received from HB 2017 will be primarily allocated to maintenance of existing transportation facilities and operations.

More information is available at: <http://www.oregon.gov/ODOT/Documents/HB2017-FAQ.pdf>

Small City Allotment

The Small City Allotment is an annual allocation of state funds for local transportation projects. Through an agreement between the League of Oregon Cities and ODOT, ODOT sets aside \$5,000,000 each year (half from city gas tax revenue and half from the State Highway Fund) for cities under 5,000 residents. The Small City Advisory Committee (SCAC), consisting of representative from each ODOT Region, reviews applications submitted under the Small City Allotment Program and makes recommendations for funding to the director.

Local Sources

Economic Improvement Districts (EIDs)

Transportation improvements can often be included as part of larger efforts aimed at business improvement and retail district beautification. Economic Improvement Districts collect assessments or fees on businesses in order to fund improvements that benefit businesses and improve customer access within the district. Adoption of a mutually agreed upon ordinance establishing guidelines and setting necessary assessments or fees to be collected from property owners is essential to ensuring a successful EID.

Local Improvement Districts (LID)

Local Improvement Districts (LIDs) are most often used to construct projects such as streets, sidewalks, or bikeways. Through the LID process, the costs of local improvements are generally spread out among a group of property owners within a specified area. The cost can be allocated based on property frontage or other methods such as trip generation. The costs of an LID project are borne primarily by property owners, moderate administrative costs must be factored in, and the public involvement process must still be followed. If the cost of the local improvement is not 100 percent funded by property owners, the City is required to contribute the remaining unfunded portion of the improvement.

Urban Renewal District

Urban Renewal Districts are separate taxing districts created to remove blight within a district. Each Urban Renewal Plan has identified actions that will remove the blight within the District. Those actions are funded by debt financing (e.g., bonds) using the incremental tax revenue generated from improvements on private property that increase the tax assessable value of that property that then create additional property tax revenue. The additional tax revenue (i.e., tax increment) is then directed to the Urban Renewal District to be used for blight removal. This public finance method is referred to as Tax Increment Financing (TIF) and is limited to Urban Renewal in the State.

The City of Waldport established an Urban Renewal Agency in 1981 to address blighted areas in Old Town and the commercial district along US 101. The City's first Urban Renewal Plan was successfully concluded in 2011. The current

Urban Renewal Plan (Plan #2), was adopted by the City in 2005 to create new property values, stimulate economic growth, accelerate development of vacant, underutilized land, and modernize public facilities.

More information is available at: https://www.oregon.gov/DOR/forms/FormsPubs/urban-renewal-circular_504-623.pdf

Local Bond Measures

Local bond measures, or levies, are usually initiated by voter-approved general obligation bonds for specific projects. Bond measures are typically limited by time, based on the debt load of the local government or the project under focus. Funding from bond measures can be used for right-of-way acquisition, engineering, design, and construction of transportation facilities. Transportation-specific bond measures have passed in other communities throughout Oregon. Though this funding source is one that can be used to finance a multitude of project types, it must be noted that the accompanying administrative costs are high and voter approval must be gained. In addition, local bonds for transportation improvements will compete with local bonds for other public needs, such as fire and rescue, parks and recreation, schools, libraries, etc.

Local Fuel Tax

While every state collects an excise tax on fuel, Oregon is one of only nine states that permits cities and counties to impose a local fuel tax in order to pay for street operation, maintenance and preservation activities. The taxes are paid to the City monthly by distributors of fuel. Voters would need to pass the tax, and the process for presenting such a tax to voters will need to be consistent with Oregon State law as well as the laws of the City. Nearly 30 cities and counties throughout Oregon impose a local fuel tax, including Astoria (\$0.03 per gallon), Newport (\$0.03 per gallon Jun 1st – Oct 31st; \$0.01 per gallon Nov 1st – May 31st), Reedsport (\$0.03 per gallon May 1st – Oct 31st; \$0.01 per gallon Nov 1st – May 31st) Canby (three cents per gallon), Warrenton (\$0.03 per gallon), and Tillamook (0.015 per gallon).

User Fees

Fees tied to the annual registration of a vehicle to pay for improvements, expansion, and maintenance to the street system. This may be a more equitable assessment given the varying fuel efficiency of vehicles. Regardless of fuel efficiency, passenger vehicles do equal damage to the street system. The cost of implementing such a system could be prohibitive given the need to track the number of vehicle miles traveled in every vehicle. Additionally, a user fee specific to a single jurisdiction does not account for the street use from vehicles registered in other jurisdictions.

Street Utility Fees/Road Maintenance Fee

The fee is based a flat fee charged to each property, on the number of trips a particular land use generates, or some combination of both and is usually collected through a regular utility bill. For the communities in Oregon that have adopted this approach, it provides a stable source of revenue to pay for street maintenance allowing for safe and efficient movement of people, goods, and services.